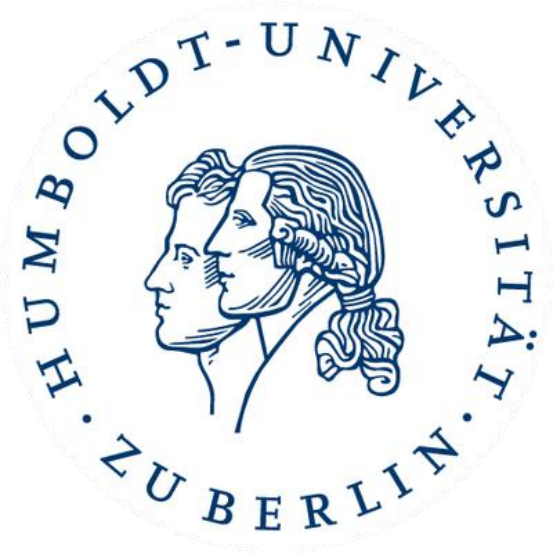
Analysis of National Identity Data
Based on ISSP Questionnaires



Bachelor's Thesis

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Abstract

In today's world of mass communication and globalization, a number questions seem to be coming up at an increasing rate: what does it mean to belong to a certain nationality? Does nationality even matter?

Even when it comes to an abstract topic such as national identity, quantitative methods are widely used, as they offer an important groundwork for further research and pattern recognition. They are the first step, the foundation on which one can conduct various researches of increasing complexity.

This paper will introduce such a foundation, a quantitative analysis of data, using a variety of methods ranging from the Factor Analysis to Cluster Analysis in an attempt to shed light on the question of national identity.

Index

Appendix

1 Introduction

The world has come a long way during the last century. The conception of the European Union has brought a new era to the continent of Europe. Free trade has been introduced, a common currency has been created and managed by a central bank. With the removal of border controls, travel within the EU has become very easy and migration was not far behind.
However, this movement toward internationalism and efficiency gradually forced the issue of nationality to the background. As a result, many ask themselves questions about their own national identity as well as of strangers in their country that are trying to adapt themselves to their new environment.

This paper will explore the perceived national identity of countries and regions within the geographic area of Europe, looking for possible latent variables that could describe ones feeling toward their country. The aim is to find out what countries within Europe are more liberal or conservative in their political views, as well as how well the respondents identify and support their country.

After taking a look at the survey and the data, this paper will move on to the methodology and analysis. With the help of the Factor Analysis and Cluster Analysis the different regions within Europe will be examined and a verdict will be made. The analysis will primarily be exploratory.

1.1 National Identity

The definition of national identity is subject to debate in the field of social sciences and will vary depending on where you look. A general definition would be one's identity or sense of belonging to one state or to one nation[1]. Most people tend to identify themselves with the country they were born in and show pride in their country's culture, traditions, language and politics. It is viewed as "an awareness of difference" and a "feeling and recognition of 'we' and 'they'"[2].

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[1] Wikipedia. National identity, para.1. Article version: 9 September 2017. URL: https://en.wikipedia.org/wiki/National_identity. Original source: *Ashmore, Richard; Jussim, Lee; Wilder, David (2001). Social Identity, Intergroup Conflict, and Conflict Reduction. USA: Oxford University Press. pp. 74–75*

[2] Quote: Wikipedia. National identity, para.1, l.4. Article version: 9 September 2017. URL: https://en.wikipedia.org/wiki/National_identity. Original source: *Lee, Yoonmi (2012). Modern Education, Textbooks, and the Image of the Nation: Politics and Modernization and Nationalism in Korean Education. Routledge. p. 29.*

It is not an inborn trait, but is assumed to be socially constructed[3]. The question of national identity in itself can be a slippery slope, as it can lead to the national character being reduced to stereotypes, even going as far as being accused of nationalism.

Whichever definition one would use, it is obvious that this is not a variable that is easily measured. It is a complex combination of factors, it can not be observed and measured directly and as such would qualify as a latent construct that needs to be measured indirectly through the aforementioned influences[4].

1.2 ISSP

The organization behind the data which will be used in this paper is the International Social Survey Programme (ISSP). "*The ISSP is a cross-national collaboration programme conducting annual surveys on diverse topics relevant to social sciences*"[5]. The founding member of the programme were Australia, Germany, Great Britain and the US. Since then, it has since included various other nations into its fold. Currently, 45 countries are members of the ISSP[6]. The programme has come a long way since its establishment. With time, they accumulated a significant pool of respondents that participated in their surveys. Among their field of research is the question of the national identity.

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[3] Wikipedia. National identity, Formation of national identity. Article version: 9 September 2017. URL: https://en.wikipedia.org/wiki/National_identity. Original source: *Anderson, Benedict (1991). Imagined Communities: reflections on the origin and spread of nationalism. Verso. p. 133.*

[4] Portland State University. Newsom. Psy 510/610 Structural Equation Modeling, p.1, para.2. Winter 2017. URL: http://web.pdx.edu/~newsomj/semclass/ho_latent.pdf. Accessed: September 2017

[5] Quote: ISSP Website. About ISSP, The International Social Survey Programme, para.1. URL: http://www.issp.org/about-issp/. Accessed: September 2017

[6] ISSP Website. Member States, Our Members. URL: http://www.issp.org/members/member-states/. Accessed: September 2017

2 Data

"*The ISSP National Identity module series comprises three cross-national surveys conducted in 1995, 2003 and 2013*"[7]. The primary goal of the survey is the identification of the most important characteristics for national consciousness and identity. "*It deals primarily with the respondents' global, national and ethnic identification, aspects of national pride and their support for their own nation, as well as their attitudes towards foreigners, foreign cultures and their view on what makes someone a true member of one's own nationality*"[8].
The survey this paper is based on was conducted in 2013. It offers among the most up to date informations on this topic. This section will be used primarily to examine the survey and the data used for the analysis.

The data itself can be found on the GESIS website. The GESIS - Leibniz Institute for the Social Sciences is the largest institute for social sciences in Germany. They are an important part of the ISSP surveys, but also collaborates with various other institutes and programmes like the PIAAS or the ALLBUS[9]. It is part of their responsibilities to archive the data of various surveys, like the National Identity survey of the ISSP.

2.1 Data collection

2.1.1 Creation of the survey

The ISSP National Identity 2013 Survey is based on the same survey from 10 years ago. However, certain adjustments and alterations had to be made. As with most things, a survey will change and evolve with every iteration. The focus of the ISSP Programme is to offer relevant data and as such, new priorities may need to be adopted[10].

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[7] Quote: GESIS Leibnitz-Institut für Sozialwissenschaften. Modules, National Identity, para.1. URL: https://www.gesis.org/issp/modules/issp-modules-by-topic/national-identity/. Accessed: October 2017

[8] Quote: GESIS Leibnitz-Institut für Sozialwissenschaften. Modules, National Identity, para.2. URL: https://www.gesis.org/issp/modules/issp-modules-by-topic/national-identity/. Accessed: October 2017

[9] Wikipedia. GESIS-Leibnitz Institute for the Social Sciences, Data collection. Article version: 16 June 2017. URL: https://en.wikipedia.org/wiki/GESIS_%E2%80%93_Leibniz_Institute_for_the_Social_Sciences#Data_collection

[10] GESIS Leibnitz-Institut für Sozialwissenschaften. ISSP 2013-"National Identity III"-ZA No. 5950. Report on Questionnaire Development (PDF), p.3. URL: https://dbk.gesis.org/dbksearch/file.asp?file=ZA5950_ NationalIdentityCompilationISSP.pdf.

One important part of the creation of this survey was to examine how the previous surveys were used.

National Identity in General (Including "Truly" Nationality items)	30.60%
Social Identity (2013)	2.2
Immigration/Immigrants	23.2
Globalization	15.8
Trade/Protectionism	7.9
Other	7.9
National Pride	15.4
Regional Association (e.g. EU/NAFTA)	8.9
Citizenship	2.2
Ethnic Assimilation	1.7
Geographic Area Clostest to	1.5
Other	1
	100.1

Table 1: National Identity Reference by Topic Areas[11]

These results would then show the direction the new survey will take in order to keep the data relevant to scholars. Researchers were then asked if they were supportive of a 2013 ISSP replication of National Identity and would offer assistance in advising on its content, of which 32 agreed[12].

It has been agreed to add 43 items previously used both in 1995 and 2003, which meant an exact replication of the items according to ISSP rules. Additions have been proposed by the participating countries, some of which can be used to supplement existing topics, others to represent an entirely new one. Several items have also been nominated for deletion[13]. Following a voting process and multiple iterations of pretests, including suggestion the various countries would make for their respective surveys, the final decision will circulate to the ISSP and a survey can be prepared for participating countries. The vote for 2013 has yielded the following result:

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[11] GESIS Leibnitz-Institut für Sozialwissenschaften. ISSP 2013-"National Identity III"-ZA No. 5950. Report on Questionnaire Development (PDF), p.6, table 2. Form Adjusted.
URL: https://dbk.gesis.org/dbksearch/file.asp?file=ZA5950_NationalIdentityCompilationISSP.pdf.

[12] GESIS Leibnitz-Institut für Sozialwissenschaften. ISSP 2013-"National Identity III"-ZA No. 5950. Report on Questionnaire Development (PDF), p.4, para.3. URL: https://dbk.gesis.org/dbksearch/file.asp?file=ZA5950_ NationalIdentityCompilationISSP.pdf.

[13] GESIS Leibnitz-Institut für Sozialwissenschaften. ISSP 2013-"National Identity III"-ZA No. 5950. Report on Questionnaire Development (PDF), pp.8-11. URL: https://dbk.gesis.org/dbksearch/file.asp?file=ZA5950_ NationalIdentityCompilationISSP.pdf.

Priority	Topic	Votes
2	National Pride/shame - General and Specific	25
5	Being Truly [NATIONALITY]	19
6	Globalization	18
1	Immigration and immigrants	26
8	Geographic Area	6
3	ethnic Assimilation/Pluralism	21
7	Citizenship	8
4	Political Effects of Nationalism	20

Table 2: The topic priority that was votes[14]

2.2 Questionnaire

The final questionnaire is divided into two major sections. The first one consists of questions about national identity, while the second part deals with factors which may have an influence on answers given in the first part.

The first section is itself divided into sub-groups, each posing questions about one related topic. The grouping of the questions is purposefully arranged, as each group represents a latent construct. This division is what formed the basis for the Factor Analysis in this paper.

Subgroup	No. of Items	Variables
Identification with 'Community'	4	V5-V8
Views on what Makes Someone Truly (NATIONALITY)	8	V9-V16
Comparative Support for Own Nation	5	V17-V21
Proud of Aspects of National Life (1)	3	V22-V24
Proud of Aspects of National Life (2)	11	V25-V34, V58
Views on National versus International Issues (1)	3	V35-V39
Views on National versus International Issues (2)	5	V40-V44
Views on National versus International Issues (3)	13	V45-V57
Patriotism: Impact	4	V59-V62
Background and Identification	2	V63-V64
Optional: International Integration	6	V65-V70

Table 3: ISSP National Identity 2013 Survey Questions[15][16]

[14] GESIS Leibnitz-Institut für Sozialwissenschaften. ISSP 2013-"National Identity III"-ZA No. 5950. Report on Questionnaire Development (PDF), p.14, Voting Result. Form adjusted. URL: https://dbk.gesis.org/dbksearch/file.asp?file=ZA5950_NationalIdentityCompilationISSP.pdf.

[15] GESIS Leibnitz-Institut für Sozialwissenschaften. ISSP 2013-"National Identity III"-ZA No. 5950. Overview on questions, variables and replications (PDF). URL: https://dbk.gesis.org/dbksearch/file.asp?file=ZA5950_overview.pdf.

[16] For short variable definition, see digital files: ISSP National Identity III (adjusted).sav (SPSS Statistics Data Document), variable: V5-V70, Labels. For detailed variable report, see GESIS Data Archive ISSP 2013 variable report (codebook) (PDF), URL: https://dbk.gesis.org/dbksearch/download.asp?file=ZA5950_cdb.pdf

All 66 questions in the first part are closed questions, bar a few exceptions. Scaled Questions, to be precise, which are most commonly based on five-point-scale Likert-Scale[17]. The advantage of this technique is that it is time-efficient. Responses are easy to code and interpret. This is ideal for a quantitative type of research, but is does have its disadvantages. The respondents may find that the possible answers do not match their own opinion. It also disallows the researcher to find the reason behind the given answers. However, this is a necessary trade-off, as opinions are often complex, not easily put into words and often highly specific. An analysis of each individual would be too time consuming and costly.

The second part of the survey consists of questions regarding factors that could have been influencing the responses given the first section, such as wages or working hours. This part of the survey is not relevant to this paper, as it would be moving into inductive statistics.

2.3 Descriptive Statistics

The ISSP National Identity 2013 data set has a total of 368 variables and a total of 45297 respondents, which had a mean age 47.25 [Table 4]. There are between 1000 and 2000 respondents per country with Belgium having the most numerous with 2202 and Croatia the least with only 1000[18].

N	Valid	45134
	Missing	163
Mean		47.25
Median		47.00
Std. Deviation		17.454
Range		97
Minimum		15
Maximum		112

Table 4: Age of respondents

As mentioned above, each country has a variable dividing the respondents into their respective regions. All countries range between 5 and 20 regions, with two exceptions, namely Sweden and France, which both have 70 and 95 regions, respectively[19]. This is something that will cause problems further down the line and will need correcting.

[17] GESIS Leibnitz-Institut für Sozialwissenschaften. ISSP 2013-"National Identity III"-ZA No. 5950. ISSP 2013 source questionnaire (PDF). URL: https://dbk.gesis.org/dbksearch/file.asp?file=ZA5950_bq.pdf.

[18] For descriptive statistics on each individual country, see digital files: Descriptive Statistics.spv (SPSS Statistics Output Document)

[19] For full region listing, see digital files: ISSP Means V1.sav (SPSS Statistics Data Document), variable: Regions

3 Methodology

In this section, the different methods, which have been used in this paper will be described as well as looked into why these particular methods were chosen as analytical tools in this paper.

3.1 Factor Analysis

The Factor Analysis is a multivariate statistical method to determine variability among observed, correlated variables in a dataset in order find unobservable (latent) variables. It also serves as a way to reduce variables to fewer factors, easing the use of unwieldy datasets. There would otherwise be too many pairwise correlations between items to consider[20].

There are two major types of Factor Analyses, the Exploratory Factor Analysis (EFA), which is the one used in this paper and the Confirmatory Factor Analysis (CFA). Generally speaking, he EFA is used to find underlying constructs within a set of items. These items are used to explain the factor. The CFA requires a theory and constructs, which then can be tested, so the factors are used to explain the items. Contrary to the CFA, the EFA requires no a priori knowledge about the components, allowing the elimination of problematic variables[21].

This approach is relevant for the question of national identity, as the aforementioned structuring in the survey in fact represents latent variables. The Factor Analysis itself is designed for interval data. However, it can also be used for ordinal data[22], the most prominent type of data in the National Identity survey, i.e. the Likert-Scale.

3.1.1 Cronbach's Alpha

Before a Factor Analysis should be attempted, it is advisable, in case of a questionnaire, to check the data for its internal consistency. For example, when a respondent answers in favour of immigrants, all the other answers regarding immigrants should also be positive for it to be consistent.

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[20] Yong, Pearce (2013). A Beginner's Guide to Factor Analysis: Focusing on Exploratory Factor Analysis. What is Factor Analysis, p.80, para.1-3. Published in: Tutorials in Quantitative Methods for Psychology, Vol.9(2), p.79-94, 2013. URL: http://www.tqmp.org/RegularArticles/vol09-2/p079/p079.pdf

[21] Williams et al. (2012). Exploratory factor analysis: A five-step guide for novices. Types of Factor Analysis, p.3. Published in: Journal of Emergency Primary Health Care (JEPHC), Vol.8, Issue 3, 2010 - Article 990399. URL: http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.414.4818&rep=rep1&type=pdf

[22] Cornish (2007). Statistics: 3.3 Factor Analysis. Assumptions, p.1. URL: http://www.statstutor.ac.uk/resources/uploaded/factoranalysis.pdf.

Cronbach's Alpha is a measure of internal consistency or reliability. It shows how closely related a set of items are as a group. For consistency to exist, the variables must be at least moderately correlated to each other[23].

The Alpha is computed by correlating the score for each scale item with the total score for each observation, then comparing that with the variance for all individual item scores[24].

$$\alpha = \frac{k \times \bar{c}}{\bar{v} + (k-1)\bar{c}} \qquad (1)$$

In this equation[25][26], k is the number of items, $\bar{c}$ is the average covariance between items and $\bar{v}$ is the average variance of each item.
The alpha coefficient ranges between 0 and 1 in its assessment of reliability. If all of the scale items have no correlation (share to covariance), then alpha is equal to 0. Once the covariance starts increasing, so will the alpha[27]. The more items have shared covariance, the more likely they measure the same underlying factor.
There is no strict rule of determining what a "good" alpha coefficient is, as it depends on the scale in question, but there is a general agreement that an alpha of 0.7 or higher is recommended and should be no lower that 0.5[28][29].

However, this test does not give any information regarding the dimensionality of the data[23]. A value close to 1 does not imply that the data is unidimensional. This would be a major drawback when using this test to see how many factors can be extracted from a set of items, but in this case it is irrelevant, as the factor analysis in this paper will aim to achieve a one-factor-solution where ever possible.

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[23] UCLA-Institute for Digital Research and Education. WHAT DOES CRONBACH'S ALPHA MEAN? SPSS FAQ, para.1. URL: https://stats.idre.ucla.edu/spss/faq/what-does-cronbachs-alpha-mean/. Accessed: October 2017

[24] University of Virginia Library Research Data Services + Sciences. Using and Interpreting Cronbach's Alpha, para.2. URL: http://data.library.virginia.edu/using-and-interpreting-cronbachs-alpha/. Accessed: October 2017

[25] UCLA-Institute for Digital Research and Education. WHAT DOES CRONBACH'S ALPHA MEAN? SPSS FAQ, equation 1. URL: https://stats.idre.ucla.edu/spss/faq/what-does-cronbachs-alpha-mean/. Accessed: October 2017
[26] University of Virginia Library Research Data Services + Sciences. Using and Interpreting Cronbach's Alpha, equation 2. URL: http://data.library.virginia.edu/using-and-interpreting-cronbachs-alpha/. Accessed: October 2017

[27] University of Virginia Library Research Data Services + Sciences. Using and Interpreting Cronbach's Alpha, para.4. URL: http://data.library.virginia.edu/using-and-interpreting-cronbachs-alpha/. Accessed: October 2017

[28] University of Virginia Library Research Data Services + Sciences. Using and Interpreting Cronbach's Alpha, para.5. URL: http://data.library.virginia.edu/using-and-interpreting-cronbachs-alpha/. Accessed: October 2017
[29] Tavakol, Dennick (2011). Making sense of Cronbach's alpha. Numerical values of alpha p.54. URL: https://www.ijme.net/archive/2/cronbachs-alpha.pdf.

3.1.2 Factor extraction[30]

After Cronbach's Alpha has delivered satisfactory results, the Factor Analysis itself can be undertaken. At the centre of the Factor Analysis is the extraction of the factors. There are numerous ways to do so. Two of the most prominent are the Principal Component Analysis (PCA) and Principal Axis Analysis (PAF). The PCA is the default method in many statistical programs, including SPSS, and as a result will be method of choice in this paper.

Principal Component are the underlying structure in the data. The starting point for the PCA is a set of items, which can be represented in the matrix **X**. Every item, X_1 to X_n, is a vector in said matrix.

$$\mathbf{X} = \begin{pmatrix} X_1 \\ X_2 \\ \vdots \\ X_p \end{pmatrix} \qquad (1)$$

The factors are represented by the vectors Y_1 to Y_n, which consists of each item vector multiplied by a coefficient. Each factor is very similar to a linear regression without an intercept, as it shows to what degree each items flows into the factor, Y_i representing the dependent variable, X_i the independent variable and e_{ij} being the de-facto regression coefficient.

$$\begin{aligned} Y_1 &= e_{11}X_1 + e_{12}X_2 + \cdots + e_{1p}X_p \\ Y_2 &= e_{21}X_1 + e_{22}X_2 + \cdots + e_{2p}X_p \\ &\vdots \\ Y_p &= e_{p1}X_1 + e_{p2}X_2 + \cdots + e_{pp}X_p \end{aligned} \qquad (2)$$

It is important to define the variance for Y_i in order to find the principal components. Since Y_i is a function of random data, it has a variance, which is defined as follows: (3)

$$\mathrm{var}(Y_i) = \sum_{k=1}^{p}\sum_{l=1}^{p} e_{ik}e_{il}\sigma_{kl} = \mathbf{e}_i'\Sigma\mathbf{e}_i \qquad (3)$$

[30] This section is based on the lessons made available by PennState Eberly College of Science for their STAT 505 module (Applied Multivariate Statistical Analysis). URL: https://onlinecourses.science.psu.edu/stat505/node/51. Accessed: September 2017.

The first principal component is found by defining the coefficients $e_{11}...e_{1n}$ in such a way that its variance is maximized, with the sum of squared coefficients is equal to one.

$$\operatorname{var}(Y_1) = \sum_{k=1}^{p}\sum_{l=1}^{p} e_{1k}e_{1l}\sigma_{kl} = \mathbf{e}_1'\Sigma\mathbf{e}_1 \qquad (4)$$

$$\mathbf{e}_1'\mathbf{e}_1 = \sum_{j=1}^{p} e_{1j}^2 = 1 \qquad (5)$$

The second principal component is then defined by maximizing the remaining variance.

$$\operatorname{var}(Y_2) = \sum_{k=1}^{p}\sum_{l=1}^{p} e_{2k}e_{2l}\sigma_{kl} = \mathbf{e}_2'\Sigma\mathbf{e}_2 \qquad (6)$$

This is also where a second constraint comes into play, namely that new components are not correlated with the previous ones.

$$\operatorname{cov}(Y_1, Y_2) = \sum_{k=1}^{p}\sum_{l=1}^{p} e_{1k}e_{2l}\sigma_{kl} = \mathbf{e}_1'\Sigma\mathbf{e}_2 = 0 \qquad (7)$$

This process is then repeated until a certain criteria is met. There are multiple ways of knowing how many factors need to be extracted. The most common criterion is called the “Kaiser Rule”, also called Eigenvalue Criterion, which says that factor will only be extracted, so long its Eigenvalue is greater than 1. A factor with an eigenvalue of 1 accounts for as much variance as a single variable. Only factors that explain at least the same amount of variance as a single variable are worth analysing[31][32]. This is the default setting of many statistical programs, including SPSS.

A second way of finding the optimal amount of variables is to use a scree plot. A scree plot shows the eigenvalues on the y-axis and the number of components on the x-axis. The number of components is determined by the position on the y-axis before the plotted line turns sharply right[32]. This is also called the “Elbow Criterion”.

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[31] Cliff (1988). The Eigenvalues-Greater-Than-One Rule and the Reliability of Components. Kaiser (1960) Rationale, p.276-277. Published in: Psychological Bulletin, Vol.103, No.2, p.276-279, 1988. URL: http://www.rc.usf.edu/~jdorio/FA/Cliff%20(1988)%20The%20Eigenvalues-Greater-Than-One%20Rule%20and%20the%20Reliability%20of%20Components.pdf

[32] Rahn, PhD. Factor Analysis: A Short Introduction, Part 4-How many factors should I find? Published on: The Analysis Factor. URL: http://www.theanalysisfactor.com/factor-analysis-how-many-factors/. Accessed: September 2017.

3.1.3 Rotation

Rotation is an important feature of the factor analysis in order to simply the interpretation of the extracted components by rotating the axes of the factors within the multidimensional variable space[33].

	Component	
	1	2
National_Identity	.860	.119
Supportv2	.745	.445
Immigrant_neg_adj	.713	-.303
community	.399	.376
Imports	.803	-.280
Pat_pro	.839	-.015
Immigrant_pos_rec	.631	-.310
pat_anti_rec	.490	-.191
proud_v1	.181	.873

Table 5: Component Matrix[34]

	Component	
	1	2
National_Identity	.706	.506
Supportv2	.452	.741
Immigrant_neg_adj	.771	.064
community	.178	.518
Imports	.841	.126
Pat_pro	.749	.377
Immigrant_pos_rec	.703	.019
pat_anti_rec	.523	.059
proud_v1	-.246	.857

Table 6: Rotated Component Matrix[34]

Results like these may be difficult to interpret seeing as there are negative factor loadings and, as is the case for the item “community”, the loading for both factors are very similar [Table 5]. By rotating the axes and thus changing the loadings it is possible to find a less ambiguous fit between the items and components [Table 6].

In broad strokes there a two ways to rotate axes, oblique and orthogonal. This refers to the angle between the X and Y axes. Oblique rotation allow the factors to correlate whereas orthogonal ones produce factors that are uncorrelated. The one used in this paper is called the Varimax rotation, which is an orthogonal rotation[35]. This is done in order to be able to clearly distinguish between the different factors and make for an interpretation a lot easier. A second advantage of using the Varimax rotation to achieve orthogonal factors is that it enables a visual representation of the factors in a Cartesian coordinate system.

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[33] Rahn, PhD. Factor Analysis: A Short Introduction, Part 2-Rotations. Published on: The Analysis Factor. URL: http://www.theanalysisfactor.com/rotations-factor-analysis/. Accessed: September 2017.

[34] Tables taken from section 4.4 and used as an example.

[35] Osborne, University of Louisville (2015). What is Rotating in Exploratory Factor Analysis? Different types of rotations, p.4-5. Published in: Practical Assessment, Research & Evaluation, Vol.20, No.2, January 2015. URL: http://pareonline.net/getvn.asp?v=20&n=2

3.2 Cluster Analysis

Cluster analysis is an exploratory tool and is used to divide the data into in a way that the degree of association between two objects is at its highest if they belong to the same group and at their lowest if they do not. It is a popular tool in social sciences for pattern recognition[36]. Much like the Factor Analysis, it also served to reduce the dimensions of a data set, in case by grouping observations, allowing for quicker and simpler interpretations.

3.2.2 TwoStep Clustering[37]

A very useful exploratory tool found in SPSS, the TwoStep Cluster Analysis, makes the identification of the optimal number of clusters much simpler. This analysis is designed to reveal the natural grouping within a dataset.

The TwoStep Cluster Analysis starts with pre-clustering of data. Data is scanned one by one and it is decided whether the current observations should be merged with any previously formed clusters. This decision is based on one of two distance criteria, the Log-Likelihood distance or the Euclidean distance. The Euclidean distance is an ordinary straight line between two points in Euclidean space[38]. It is clearly defined between two points and is measured from the centre in case of clusters. The Log-Likelihood distance is a probability based distance. This method requires the variables to be normally distributed.

After several iterations, it turned out that the Log-Likelihood distance is the better fit for the data, as the clusters resulting from it were almost identical to the ones found with the help of the Hierarchical Cluster Analysis[39].

There is an option to handle outliers during this process, however, this will be relevant in this analysis, as SPSS could not detect any possible outliers during the process.

After the sub-clusters are determined during the first step, they will be combined. TwoStep uses an agglomerative hierarchical clustering method, which will be explained in the next section.

The great boon of the TwoStep method is that it is capable of determining how many clusters would be optimal for any given set of data. The result of this analysis will be used in conjunction with the second clustering method used in this paper.

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[37] This section is based on the guide made available by IBM regarding the TwoStep cluster analysis in SPSS. URL: https://www.ibm.com/support/knowledgecenter/es/SSLVMB_20.0.0/com.ibm.spss.statistics.help/alg_twostep.htm. Accessed: September 2017.

[38] Wikipedia - Euclidean Distance, para.1. Version: 19 September 2017. URL: https://en.wikipedia.org/wiki/Euclidean_distance

[39] See section 4.5.2

3.2.2 Hierarchical Clustering

Another clustering method is the aforementioned hierarchical cluster analysis. This method does not require a priori assumption about the number of clusters, but instead it builds a multilevel hierarchy or all possible cluster solution, which can be visualized in a dendrogram[40]. There are two ways in which this procedure works:

• Divisive: All observations start as one cluster and are then divided until every observation is its own cluster[41]
• Agglomerative: Each observation starts as its own cluster, then they are gradually merged until only one single cluster remains[41] This is the default setting of SPSS, which makes this method of choice for this paper.

The way the different clusters are formed depends on the linkage methods. Which method is best is highly dependent on the desired shape of cluster one would want to achieve. There is no strict criterion for which method is the right one. Each linkage method will create differently shaped clusters. For example, single linkage will combine the two nearest observations to a single cluster. More often than not the result will be spectrum or chain shaped clusters, whereas the complete linkage will combine the farthest two observations to a single cluster, will often suffer from crowding, i.e. one big and multiple small clusters.
For this paper, elliptical clusters would be the preferred outcome, as it makes the distinction between the respective clusters more obvious and thus simplifies the interpretation. In this particular case, it is advantageous to allow observations, i.e. the different regions, to have a certain distance in a two dimensional space to the respective cluster centre and still be part of said cluster, as opposed to only diverge in one dimension, which is why an elliptical cluster shape is preferred.
Among the different linkage methods, there are two that will usually produce elliptical cluster shapes. The first one used will be the Average-Linkage method. The distance between two clusters is equal to the average of the distances between all observations in the first and second cluster. During each step of this process, the two closest clusters are combined[42].

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[40] Yim, Ramdeen, School of Psychology, University of Ottawa (2015). Hierarchical Cluster Analysis, p.9. Published in TQMP, Vol.11, No. 1, 2015. URL: http://www.tqmp.org/RegularArticles/vol11-1/p008/p008.pdf

[41] The Stanford Ntural Language Processing Group. Hierarchical agglomerative clustering, para.1. URL: ttps://nlp.stanford.edu/IR-book/html/htmledition/divisive-clustering-1.html. Published by: Cambridge University Press, 2008.

[42] PennState Eberly College of Science. 14.4-Agglomerative Hierarchical Clustering, para.4. URL: https://onlinecourses.science.psu.edu/stat505/node/143. Accessed: September 2017.

The Ward's method is the second method used to achieve elliptic clusters[43]. This method is based around the total sum of squares within each cluster. If y is a variable and $\bar{y}$ is is mean, then the total sum-of-squares is calculated by the following formula[44]:

$$\mathrm{TSS} = \sum_{i=1}^{n} (y_i - \bar{y})^2 \qquad \textbf{(1)}$$

The proximity between two clusters is defined by how much the sum of squares of a cluster would increase if merged with another one. The more the sum-of-squares would increase, the further apart are the clusters. Since Ward's method uses the agglomerative algorithm, the sum of squares starts out at zero, since every observation is its own cluster. By merging clusters that would result in the smallest increase in the total sum of squares, Ward's method keep cluster growth at a minimum[45].

[43] The Pennsylvania State University, 2004. Cluster Analysis, para.4. URL: http://sites.stat.psu.edu/~ajw13/stat505/fa06/19_cluster/09_cluster_wards.html. Accessed: October 2017.

[44] Wikipedia. Total sum of squares, equation 1. Version: 2 July 2017. URL: https://en.wikipedia.org/wiki/Total_sum_of_squares

[45] Carnegie Mellon University. 2.1 Ward's method, p.3. URL: http://www.stat.cmu.edu/~cshalizi/350/lectures/08/lecture-08.pdf. Accessed: October 2017.

4 Data Processing

This section deals with the application of the aforementioned methods in SPSS and Excel. As mentioned previously, this analysis aims to work on the regional level, which is why a significant part of this analysis revolves around adjusting the survey data and creating a new data set with regions as observations, as opposed to the individual respondents, which will consist of the mean of all observation for each factor within each region. This will primarily be accomplished with the help of logical functions in Excel. All calculations will be done with SPSS.

4.1 Defining Latent Variables[46]

Before the data set can be converted into a regional data set, the latent variables need to be defined. As mentioned previously, the survey already had certain underlying constructs defined by certain questions being grouped together. The first step will be to check the reliability of those grouped variables, to test whether the items show sufficient internal consistency to support at least a moderate correlation. Once the result satisfactory, the factor analysis can follow. The goal is it to have one factor per group of items to match the system laid out by the survey. As such, it will be necessary to adjust the item selection to achieve said one-factor-solution. As long as only one principal component is extracted, there will be no need for factor rotations.

4.1.1 Identification with the community

The first group of variables asked questions pertaining to how one feels towards to the community the respondent lives in. Cronbach's Alpha has given a satisfactory result of .701. However, the omission of V9 would lead to a noticeable increase in the Alpha to .753, thus is would be feasible to remove this variable from the factor analysis [Tables 7 and 8].

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.701	.713	4

Table 7: Reliability Statistics V5, V6, V7, V8

[46] For complete output, see digital files: Factor Analysis.spv (SPSS Statistics Output Document)

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Q1a How close do you feel to: town - city? V5	6.20	3.709	.516	.396	.620
Q1b How close do you feel to: [County]? V6	6.05	3.390	.601	.451	.564
Q1c How close do you feel to: [Country]? V7	6.30	3.723	.548	.305	.604
Q1d How close do you feel to: [Continent]? V8	5.53	3.815	.322	.135	.753

Table 8: Item-Total Statistics V5, V6, V7, V8

It would make sense in the context of the underlying construct, which is about ones community and near vicinity, which is influenced by the city, county and country one lives in. However, a continent is something more intangible and is more often associated with a world map than ones nationality.
It is worth noting, that removing V7 would have led to a further increase to .762, but removing the question of how close someone feels to their country for such a minor increase would be counter-productive in terms of information gained.

As such, the factor analysis will only use variables V5 through 7. If the alpha was high, there is a very good chance that there will only be one underlying factor. It is, however, not guaranteed as Cronbach's alpha can not detect multidimensionality. As expected though, the result is one factor, which will be called "Identification with the Community" [Table 9].

	Component
	1
Q1a How close do you feel to: town - city? V5	.832
Q1b How close do you feel to: [County]? V6	.868
Q1c How close do you feel to: [Country]? V7	.748

Table 9: Component Matrix V5, V6, V7; Component 1: Identification with the Community

4.1.2 National Belonging

Variables V9 though 16 contribute to an underlying construct that describes what makes someone feel part of a nationality. With an alpha of .806, this set of items show a very good internal consistency [see Table 10].

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.806	.809	8

Table 10: Reliability Statistics V9, V10, V11, V12, V13, V14, V15, V16

However, the factor analysis produces two factors. As mentioned above, would be best to have one factor per variable group. There are two possible solutions. Solution one would be to force SPSS to only extract one factor. Solution two would be trying to omit one item from the factor to see whether the Eigenvalue Criterion would then be sufficient for a one-factor-solution. Generally, the latter option is preferable, since forcing less factors can result in fairly big losses of information.

	Component	
	1	2
Q2a How important: born in [Country]? V9	.751	-.331
Q2b How important: have [Country Nationality] citizenship? V10	.735	.073
Q2c How important: living most of life in [Country]? V11	.761	-.086
Q2d How important: able to speak [Country Language]? V12	.588	.428
Q2e How important: to be a [Religion]? V13	.588	-.359
Q2g How important: to feel [Country Nationality] V15	.628	.324
Q2h How important: to have [Country Nationality] ancestry V16	.741	-.372
Q2f How important: to respect [Country Nationality] political institutions a laws V14	.419	.695

Table 11: Component Matrix (not rotated) V9, V10, V11, V12, V13, V14, V15, V16

V14, the question about how much the respondent respects the national institution and laws would be the candidate for elimination, as it has the lowest factor loading in component 1 and having the only relatively high loading in component 2 [Table 11]. Whether it can be justified is another question.

It is possible to argue that Europe, for the most part, is a very stable region and thus it is less likely that national laws and institutions would play a major role in ones national identity. Cronbach's Alpha is at a supports omission of V14, as it would increase it to .812 [Table 12]. It a minor increase and in regular circumstances hardly worth noting, but in this case is an improvement nonetheless.

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Q2a How important: born in [Country]? V9	13.34	16.890	.614	.494	.769
Q2b How important: have [Country Nationality] citizenship? V10	13.67	18.001	.599	.418	.774
Q2c How important: living most of life in [Country]? V11	13.42	17.309	.632	.428	.768
Q2d How important: able to speak [Country Language]? V12	13.77	18.993	.455	.262	.793
Q2e How important: to be a [Religion]? V13	12.60	16.994	.464	.289	.798
Q2f How important: to respect [Country Nationality] political institutions a laws V14	13.68	19.963	.305	.191	.812
Q2g How important: to feel [Country Nationality] V15	13.72	18.777	.499	.300	.788
Q2h How important: to have [Country Nationality] ancestry V16	13.11	16.363	.623	.481	.767

Table 12: Item-Total Statistics V9, V10, V11, V12, V13, V14, V15, V16

The result ends up being a one-factor-solution, which will be called "National Belonging" [Table 13].

	Component
	1
Q2a How important: born in [Country]? V9	.774
Q2b How important: have [Country Nationality] citizenship? V10	.732
Q2c How important: living most of life in [Country]? V11	.770
Q2d How important: able to speak [Country Language]? V12	.565
Q2e How important: to be a [Religion]? V13	.598
Q2g How important: to feel [Country Nationality] V15	.609
Q2h How important: to have [Country Nationality] ancestry V16	.765

Table 13: Component Matrix V9, V10, V11, V12, V13, V15, V16;

Component 1: National Belonging

4.1.3 Support for own Nation

The third group of variables, V17 through 21, deal with how much the respondent supports his or her nation. The Cronbach's alpha for this group is .501, meaning that the inter-item correlation is much too low to have a meaningful factor extracted from it [Table 14].

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.510	.518	5

Table 14: Reliability Statistics V17, V18, V19, V20, V21

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Q3a Rather be a citizen of [Country] V17	10.98	7.456	.387	.210	.390
Q3b Things about [Country] feel ashamed V18	10.54	10.293	-.111	.015	.675
Q3c World better place if people were more like the [Country Nationality] V19	10.06	6.769	.475	.312	.322
Q3d [Country] is a better country than most other countries V20	10.48	6.894	.465	.343	.332
Q3e People should support country even if wrong V21	10.00	7.324	.291	.117	.448

Table 15: Item-Total Statistics V17, V18, V19, V20, V21

However, SPSS suggests that the omission of V18, whether the respondent feels ashamed for his or her country, would improve the alpha to .675, which is much more acceptable [Table 15]. One thing to consider would to recode the variable, as there negative correlation with the other items in this group. This is because the way the question is written. A consistent result would require a person to disagree if he or she agreed with the other statements, leading to a negative correlation.

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.607	.612	5

Table 16: Reliability Statistics V17, V18 recoded, V19, V20, V21

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Q3a Rather be a citizen of [Country] V17	12.03	8.750	.409	.210	.529
Q3c World better place if people were more like the [Country Nationality] V19	11.11	8.056	.488	.312	.484
Q3d [Country] is a better country than most other countries V20	11.53	7.938	.526	.343	.464
Q3e People should support country even if wrong V21	11.05	8.552	.323	.117	.575
Recoded Q3b Things about [Country] feel ashamed V18 recoded	10.54	10.293	.111	.015	.675

Table 17: Item-Total Statistics V17, V18 recoded, V19, V20, V21

After recoding the V18, the alpha has improved to a .607, which is still below the .675 when eliminated [Table 17]. This omission is initially hard to justify, because shame may play a big role for ones national identity. However, this question is a double-edged sword. There may be a possibility that someone is feeling ashamed for his or her country and thus does not support it, but there may be cases that the respondent is ashamed of the past of his or her country but still supports it in order to make it right.

	Component
	1
Q3a Rather be a citizen of [Country] V17	.698
Q3c World better place if people were more like the [Country Nationality] V19	.782
Q3d [Country] is a better country than most other countries V20	.800
Q3e People should support country even if wrong V21	.568

Table 18: Component Matrix V17, V19, V20, V21; Component 1: Support for the own Nation

As a result, V18 will be eliminated to achieve the desired alpha. The single resulting factor describes the “Support for the own Nation” [Table 18].

4.1.4 National Pride

The next major group of variables deals with national pride. The survey has divided this section into two parts, one going from V22 to V24, the other going from V25 to V34 and also includes V58. The variables V25 through V34 and V58 show excellent internal consistency with an alpha of .842 and no omission would be able to improve it [Table 19].

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.842	.842	11

Table 19: Reliability Statistics V25, V26, V27, V28, V29, V30, V31, V32, V33, V34, V58

However, according to the Eigenvalue Criteria, there are in fact two factors. Seeing as the alpha is very good, it is feasible to attempt to force a one-factor-solution instead [Table 20]. Although the loading are all reasonably high, the percentage of explained variance is only 39.045, which is significantly lower than the 53.483% of the two-factor-solution. This is where the working will diverge, as the choice of procedure will have a major influence on the following Cluster Analysis as well as the graphic representation of the factor solutions. For time being, both variants will go on to the next step. The single factor is simply “National Pride”, which is split into “Pride in Political Achievements” and “Pride in Historical Achievements” [Table 21]. More on that will be discussed in the later sections.

	Component
	1
Q4a Proud of: way democracy works V25	.691
Q4b Proud of: its political influence in the world V26	.718
Q4c Proud of: [Country's] economic achievements V27	.695
Q4d Proud of: its social security system V28	.645
Q4e Proud of: its scientific and technological achievements V29	.657
Q4f Proud of: its achievements in sports V30	.527
Q4g Proud of: its achievements in the arts and literature V31	.579
Q4h Proud of: [Country's] armed forces V32	.609
Q4i Proud of: its history V33	.518
Q4j Proud of: fair treatment of all groups in society V34	.656
Q12 How proud are you of being [Country Nationality] V58	.538

Table 20: Component Matrix V25, V26, V27, V28, V29, V30, V31, V32, V33, V34, V58; Component 1: National Pride

	Component	
	1	2
Q4a Proud of: way democracy works V25	.805	.125
Q4b Proud of: its political influence in the world V26	.757	.222
Q4c Proud of: [Country's] economic achievements V27	.790	.149
Q4d Proud of: its social security system V28	.767	.100
Q4e Proud of: its scientific and technological achievements 29	.407	.534
Q4f Proud of: its achievements in sports V30	.070	.725
Q4g Proud of: its achievements in the arts and literature V31	.108	.760
Q4h Proud of: [Country's] armed forces V32	.255	.636
Q4i Proud of: its history V33	.079	.701
Q4j Proud of: fair treatment of all groups in society V34	.624	.281
Q12 How proud are you of being [Country Nationality] V58	.250	.534

Table 21: Rotated Component Matrix V25, V26, V27, V28, V29, V30, V31, V32, V33, V34, V58; Component 1: Pride in Political Achievements; Component 2: Pride in Historical Achievements

The group ranging from V22-V24, on the other hand, has an insufficient alpha of .366 and would not go higher than .467, which is not enough to produce a meaningful factor solution [Tables 22 and 23].

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.366	.359	3

Table 22: Reliability Statistics V22, V23, V24

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Q3f Well in international sports makes proud to be [Country Nationality] V22	5.04	2.896	.102	.012	.467
Q3g Often less proud of [Country] than like to be V23	4.23	2.132	.254	.094	.187
Q3h World better place if [Country Nationality] acknowledged [Country's] shortcomings V24	4.52	2.191	.289	.100	.117

Table 23: Item-Total Statistics V22, V23, V24

Looking at the questions, the first one asks whether sports contributes to national pride. The liking for sport is a very subjective topic and is unlikely to have a major correlation with ones national pride consistently enough. The other two questions, V23 and V24, ask controversial questions or at least questions that one would either not know how to answer or simply does not want to be truthful, so it is not a surprise that there is little internal consistency, be it due to false answers or a very wide range of opinions. Whatever the case may be, seeing as no meaningful factor can be extracted, it would be better eliminate those three items from the analysis.

4.1.5 International Influence

This group is in itself divided into two subgroups that deal with the topic of imported goods and services with variables V35 through V39, and immigration with variables V45 through V57, respectively. The survey has summed up this group as International Issues.

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.592	.582	5

Table 24: Reliability Statistics V35, V36, V37, V38, V39

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Q5a [Country] should limit import of foreign products V35	10.45	8.763	.437	.194	.488
Q5b International bodies should enforce solutions V36	10.69	11.203	.136	.030	.633
Q5c [Country] should follow its own interests even if conflict V37	10.37	9.593	.334	.120	.545
Q5d Foreigners should not be allowed to buy land in [Country] V38	10.26	8.395	.402	.204	.506
Q5e TV should prefer [Country] films and programs V39	10.25	8.543	.436	.217	.486

Table 25: Item-Total Statistics V35, V36, V37, V38, V39

Variables 35 though 39 offer an insufficient alpha of .592, which can be improved by removing V36, which would raise the alpha to .632 [Tables 24 and 25]. While lower than most other alphas in this survey, it is sufficient as the variables show at least moderate internal consistency.

The reasoning behind the poor consistency behind with question may be because people may not care what body tackles environmental issues as long as it is acknowledged and pursued. It is also possible that many of the respondents did not know whether and how an international body can influence the environmental politics of any given country. As it stands, this numbers justify the omission, but the reason behind the poor consistency are not clear. The resulting factor will be called “International Influence” [Table 26].

	Component
	1
Q5a [Country] should limit import of foreign products V35	.701
Q5c [Country] should follow its own interests even if conflict V37	.604
Q5d Foreigners should not be allowed to buy land in [Country] V38	.719
Q5e TV should prefer [Country] films and programs V39	.729

Table 26: Component Matrix V35, V37, V38, V39; Component 1: Internaltional Influence

The group that ranges from V47 to V57, representing immigration, is more complicated. The alpha for this set of variables is not sufficient at a .207. Part of the issue is that V47 and V57 are not Likert-scale questions, but instead offer a set of predefined answers. This means that there will no meaningful correlation between those two variables and the rest and thus need to me eliminated for the factor analysis. This is not enough, however. This part of of the questionnaire has a certain pattern behind it. Roughly every second statement is in favour of immigration and the remaining ones are are against it, which results in low internal consistency if all taken together. This is a technique commonly used in questionnaires in order to verify the consistency of replies and filter out arbitrary answering patterns.

Due to the low consistency and the pattern it is feasible to assume that there are in fact two factors hidden behind this set of items, but this is by no means a confirmation. To truly confirm the amount of latent variables it is necessary to recode part of the items, thus creating internal consistency. In this case, it is reasonable to recode variables V46, V49, V51, V53, V55 and V56. The reason for that is that those statements are generally in favour of immigrants and thus low score answer on the Likert-Scale support liberalism, whereas the majority of the survey has low Likert-Scale scores supporting conservatism. This will make the interpretation a little easier, if this way ends up being the right one. Recoding the items does indeed yield a staggering improvement in the alpha score, which is now .780 [Table 27].

Reliability Statistics

Cronbach's Alpha	N of Items
.780	11

Table 27: Reliability Statistics V45, V48, V50, V52, V54, V46 recoded, V49 recoded, V51 recoded, V53 recoded, V56 recoded

	Component		
	1	2	3
Q7a Without shared customs no full membership V45	.578	.014	.052
Q9a Immigrants increase crime rates V48	.708	.169	.133
Q9c Immigrants take jobs away f people born in [Country] V50	.718	.281	-.139
Q9e Immigrants undermine culture V52	.717	.248	-.017
Q9g Illegal immigrants should be excluded V54	.604	-.099	.403
V46_rec	-.061	.150	.812
V49_rec	.284	.585	.278
V51_rec	.326	.588	.240
V53_rec	.020	.665	.279
V55_rec	.049	.795	-.191
V56_rec	.378	.320	.464

Table 28: Rotated Component Matrix V45, V48, V50, V52, V54, V46 recoded, V49 recoded, V51 recoded, V53 recoded, V56 recoded

	Initial Eigenvalues		
Component	Total	% of Variance	Cumulative %
1	3.572	32.477	32.477
2	1.350	12.277	44.753
3	1.035	9.407	54.160

Table 29: Eigenvalues V45, V48, V50, V52, V54, V46 recoded, V49 recoded, V51 recoded, V53 recoded, V56 recoded

However, the rotated factor solution yields three factors [Table 28]. The third factor has an eigenvalue that is barely past 1, which means that a two factor solution might be possible [Table 29]. Eliminating V46 does lead to two factors. The loading suggest that the recoded items describe one factor and the non-recoded ones another [Table 30]. This strongly suggest that it will be better to split this section manually and have

two single-factor solutions. Although V55 has a more unclear loading pattern that V46, it is still the latter variable that needed to be removed. The reason for that will become apparent when the items are split manually and tested for internal consistency.

	Component	
	1	2
Q7a Without shared customs no full membership V45	.581	.022
Q9a Immigrants increase crime rates V48	.717	.192
Q9c Immigrants take jobs away f people born in [Country] V50	.674	.245
Q9e Immigrants undermine culture V52	.699	.228
Q9g Illegal immigrants should be excluded V54	.656	.030
V49_rec	.286	.658
V51_rec	.319	.653
V53_rec	.031	.715
V55_rec	-.015	.709
V56_rec	.421	.446

Table 30: Rotated Component Matrix V45, V48, V50, V52, V54, V49 recoded, V51 recoded, V53 recoded, V56 recoded

As such, V45, V48, V50, V52 and V54 will form one factor describing a negative attitude towards immigration, V46, V49, V51, V53, V55 and V56 form the other factor describing a negative attitude towards immigrants.

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.689	.693	6

Table 31: Reliability Statistics V46, V49, V51,V53, V55, V56

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.737	.737	5

Table 32: Reliability Statistics V45, V48, V50, V52, V54

The first factor has a Cronbach's alpha of .737, which is satisfactory. The second factor has an alpha of .689, which can be improved to .702 by eliminating V46, a question about whether the country should help minorities to preserve traditions [Tables 31 and 32]. The somewhat lacking internal consistency was the reason why V46 was excluded in the attempted one-factor solution for this whole section. It could make sense to remove it here as well, as many people, while they do not mind immigrants, may take issue with what could seem as an attack on their own traditions,

which is why there is not as much correlation between this variable and the other ones in favour of immigration. Having said that, the gain in consistency is very minor and the removal of a variable means loss of information, which should be avoided without a very good reason. An increase of .011 in the alpha is not sufficient to justify that.

	Component
	1
Q7b Help minorities to preserve traditions V46	.427
Q9b Immigrants generally good for economy V49	.735
Q9d Immigrants bring new ideas and cultures V51	.737
Q9f Legal immigrants should have same rights V53	.652
Q9h Legal immigrants should have equal access to education V55	.564
Q10 Number of immigrants increase to country V56	.636

Table 33: Component Matrix V46, V49, V51, V53, V55, V56;
Component 1: Positive attitude towards Immigrants

	Component
	2
Q7a Without shared customs no full membership V45	.576
Q9a Immigrants increase crime rates V48	.767
Q9c Immigrants take jobs away f people born in [Country] V50	.750
Q9e Immigrants undermine culture V52	.767
Q9g Illegal immigrants should be excluded V54	.622

Table 34: Component Matrix V45, V48, V50, V52, V54;
Component 2: Negative attitude towards Immigrants

Naming both factors is problematic though, as both basically ask very similar questions, just from a different point of view. Recoding half of them should have led to one factor, which it did not, so there must be two underlying constructs. For lack of a better name, one factor will then represent the “Positive attitude towards Immigrants” [Table 33], while the other will represent a “Negative attitude towards Immigrants” [Table 34].

There are five more variables in this section, that were not mentioned, namely V40 through 44. The reason for that is that every calculation has supported the omission of those variables. All five items together produce an insufficient alpha of .344 [Table 35].

Cronbach's Alpha	N of Items
.344	5

Table 35: Reliability Statistics V40, V41, V42, V34, V44

A factor analysis shows a two-factor-solution with rather obvious loading, suggesting that V40 and V43 would create one factor and the remaining three items would create another [Table 36].

	Component	
	1	2
Q6a Large international companies damage local business V40	.02	.81
Q6b Free trade leads to better products in [Country] V41	.661	-.135
Q6c [Country] should follow decisions of international organizations V42	.756	-.034
Q6d International organizations taking too much power from the government V43	-.013	.797
Q6e I feel more like a citizen of the world than of any country V44	.598	.215

Table 36: Rotated Component Matrix V40, V41, V42, V43, V44

However, it turns out to not be the case, as the internal consistencies within those two groups are simply insufficient. V40 and V43 have a weak alpha of .502, while V41, V42 and V44 have an alpha of .386, which is also insufficient [Tables 37 and 38].

Cronbach's Alpha	N of Items
.689	6

Table 37: Reliability Statistics V40, V43

Cronbach's Alpha	N of Items
.737	5

Table 38: Reliability Statistics V41, V42, V44

This pattern suggests that there will not be any significant correlation between those items to produce meaningful factors and as such should be omitted from the analysis.

4.1.6 Impact of patriotism

This group is all about patriotism. Like in previous section, the questions here alternate between positive and negative statements. It is possible to recode two of those items to achieve internal consistency. When recoding V60 and V62, the resulting alpha improves from .316 to .615 [Tables 39 and 40].

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.315	.316	4

Table 39: Reliability Statistics V59, V60, V61, V62

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.615	.616	4

Table 40: Reliability Statistics V59, V61, V60 recoded, V62 recoded

However, when separating the items, V59 and V61 produce an alpha of .760 and V60 and V62 an alpha of .714 [Tables 41 and 42].

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.760	.760	2

Table 41: Reliability Statistics V59, V61

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.714	.714	2

Table 42: Reliability Statistics V60, V62

Seeing as the way forward is not completely clear, a factor analysis might help to decide in this matter. True enough, when working with the recoded items, the factor analysis produces two factors [Table 43].

	Component	
	1	2
Q13a Patriotism: strengthen countrys place in the world V59	.712	-.549
Q13c Patriotism: needed for [Country] to remain united V61	.725	-.530
V60_rec	.633	.615
V62_rec	.654	.590

Table 43: Component Matrix V59, V61, V60 recoded, V62 recoded

The loadings are distributed in such a manner that it is now obvious that V59 and V61 contribute to one factor, whereas V60 and V62 to both. When taking a closer look at the questions, it becomes would appear that V59 and V61 deals with the country's position in the world whereas V60 and V62 deal with tolerance. As such, it would be best to split this section into two separate factors, especially given the high alphas compared to the recoded version. This creates a factor called "Patriotism" [Table 44] and another called "Tolerance" [Table 45].

	Component
	1
Q13a Patriotism: strengthen countrys place in the world V59	.898
Q13c Patriotism: needed for [Country] to remain united V61	.898

Table 44: Component Matrix V59, V61; Component 1: Patriotism

	Component
	2
Q13b Patriotism: lead to intolerance V60	.882
Q13d Patriotism: lead to negative attitudes towards immigrants V62	.882

Table 45: Component Matrix V60, V62; Component 2: Tolerance

4.1.7 International integration

The last section was an optional part of the survey and deals with international integration and bodies, in this case the EU. While it would be possible to create a factor, it will not offer a lot of information. Since this part of the survey was optional, a lot of people did not answer, resulting in 63.115% of values missing. Consequently, the factor would be very incomplete, which causes the resulting regional mean to be heavily skewed. In order to avoid those issues, it turned out to be better to exclude this section altogether.

4.2 Interpretation of the factor solutions

Factor scores can not be interpreted on their own. Instead every score is relative to all the other factor scores. As such, the respondents, an by extension the regions and countries, can only be analysed relative to each other.

The mean factor score is 0 and a standard deviation of 1. This is due to of the standardization of the factor scores during the calculation. Observations, that have a factor scores of 0 are thus seen as the average ones of the sample. When looking at it from the perspective of a Likert-Scale, it means that 0 represents the average response. It does not mean that is the “central” response, e.g. 3 on a 5 point scale. Relative to the mean score, a positive score suggests that the respondents are above average with regard to this factor, whereas those with negative loading are below average.

From the the perspective of a 5 point Likert-Scale, it means that those with positive factor scores chose answers higher up the scale than the average respondents and those with negative scores chose a answer lower on the scale, e.g. given an arbitrary

situation where the mean answer is 2.5, those with positive scores chose answers above 2.5 and those with negative ones chose answers below 2.5. It should be noted, that the more negative a factor score is, the the lower was the chosen answer, and vice versa.

The factor “Identification with the Community” shows how close the respondents is to his own town, county and country. People that have a closer connection with their countries than other will usually have a negative score and those that do not share a particular bond will have a positive score.

“National Belonging” explored political and geopolitical factors that contribute to ones national identity. Those who support the view that factors like as birthplace, language and citizenship matter when regarding their national identity will usually have a negative score while those with a more liberal view on what it means to belong to a nation with have positives scores.

“Support for the own Nation” described the appreciation a person has for their respective country. People who show a great deal of support for their nation will have a negative factor score, while those who are indifferent or even adverse opinon about their country will have a positive factor score.

“National Pride” describes how proud a person is with regard to political and historical achievements of their country. People who show pride in their country and its achievements will have a negative score and those who feel indifferent or even ashamed will have a positive factor score.

“Foreign Influence” describes how accepting a person is towards imports and international influences of their country. Those who are accepting of those factors will have a positive factor score and those who prefer to keep them out will have a negative score.

“Positive attitude towards Immigrants” and “Negative attitude towards Immigrants” are very similar, with no immediate distinction aside of the reversed statements. As such, people who welcome immigrants will have a negative score regarding the former factor and a positive one regarding the latter one and vice versa.

“Patriotism” is fairly self-explanatory, it asks about the patriotic feelings of the respondent. People with negative scores are the ones in favour of patriotism whereas those with positive ones do not see it as a good thing.

Lastly, there is “Tolerance”. This factor is similar to those dealing with immigrants, as it asks about how tolerant the respondents is towards them. Due to how the questions are phrased, those with little tolerance will have positive scores and the tolerant ones will have negative ones.

4.3 Creating a new data set

Now that all the factors have been identified, it is time to create a new data set that regards things on a regional basis, not on an individual basis. In order to achieve this, it is necessary to calculate the means for every factor in every region. This is where SPSS will hit its limit. While it survey provides a way to separate the file by region [reference to variable] and allows one to calculate the mean, it is incapable of using said result in further calculations. This leaves us with a problem of extracting over 4000 numbers from the output, even more so if correction need to be made.

This is where the excellent synergy between Excel and SPSS comes into play. Once the outputs are exported to Excel, it is possible to filter out the means with the help of a sequence of logical functions [reference to the table]. This sequence is interchangeable and as such it can be used with every subsequent output by simply copy and pasting it into the new table. The new data set now uses regions as observations[47].

One major change is still necessary before the data set can be used for calculations. As mentioned in the section describing the original data set, France and Sweden were divided into far more regions than the rest of the countries. This leads to every every region having much less respondents, leading to rather unusual and polarized results. This will primarily become a problem when tackling the cluster analysis, but it is best to mention it here before moving on, as it changes how the factor results are interpreted. In the original data set, France is divided into Departments whereas Sweden into counties. In order to reduce the amount of measured regions, it is necessary to find an alternative method of dividing a country. Luckily, there is an official standard for creating a subdivision of countries for statistical purposes, which is called the Classification of Territorial Units for Statistics (NUTS)[48].

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[47] For full mean calculations, see digital files: Mean Regions.xlsx (Excel Spreadsheet)

[48] Wikipedia. Nomenclature of Territorial Units for Statistics. Version: 31 March 2017. URL: https://en.wikipedia.org/wiki/Nomenclature_of_Territorial_Units_for_Statistics

To be in line with the number of regions of other countries, both France and Sweden can be reduced to their Level 2 division, which means that the Swedish counties will be combined into 8 national areas[49] and French Departments will be combined to 13 regions, with the remaining 5 overseas regions being discarded as they were not part of this survey[50].

There are two ways to achieve this. The first one would require a reworking of the original ISSP data set by recoding several variables and calculate the region means anew. This is not very practical. The second way would be to work completely within the new data set by combining the respective region and calculating the weighted mean of the resulting territories. Once again, this where Excel can help a lot. It is possible to filter out the number of respondents per region with a logical function and the use of mathematical function to calculate the new weighted mean. Once again, those functions will be variable and thus easily applied to new Excel files [reference].

With the new data set completed, further calculations as well as analyses can take place.

4.4 Meta Factors[51]

The factors identified in the previous section could themselves be grouped into so-called meta factors. This serves mainly to simplify the evaluation and to easily identify the views on national identity that respondents from certain regions may have as well as the general tendency of the whole country. The identification of two meta factors will also allow a graphic representation of the analysis on a two-dimensional scatter plot, which saves the trouble of having to plot every factor against every factor, making the interpretation unwieldy and hard to follow.

Before a factor analysis can be attempted, there are several adjustments that need to be made. Due to how the statements in survey are phrased, the factors “Tolerance” and “Positive attitude towards Immigrants” will yield inconsistent result in comparison with the other factors, leading to a lack of correlation between those factors, resulting in either addition factors or negative factor loading, both of which should be avoided.

The reason for that is that the statements in the survey are phrased in favour of a strong identification with the country and community as well as conservative view on political topics.

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[49] Wikipedia. NUTS statistical regions of Sweden. Version: 29 September 2016. URL: https://en.wikipedia.org/wiki/NUTS_statistical_regions_of_Sweden

[50] Wikipedia. Administrative divisions of France. Version: 14 September 2017. URL: https://en.wikipedia.org/wiki/Administrative_divisions_of_France

[51] For complete output, see digital files: Meta Factors.spv (SPSS Statistics Output Document)

This means that people that are in favour of conservative politics and those with a strong connection to their country will generally have low factor scores, while those in favour of a liberal approach and with a low connection to their country and community will have high factor scores. However, the way the states that are part of the factors "Tolerance" and "Positive attitude towards Immigrants" are phrased, the factor scores will be the other way around. To restore consistency, the factors scores for both factors must be recoded[52]. Once those two factors are brought back in line, the factor analysis itself can commence. The first factor analysis will be done with the split National Pride factor, namely the political and historical one.

	Component		
	1	2	3
Identification with the Community	-.090	.816	.062
National Belonging	.599	.648	.102
Support for the own Nation	.564	.577	-.407
International Influence	.609	.462	.440
Positive attitude towards Immigrants (recoded)	.832	-.100	.001
Negative attitude towards Immigrants	.756	.135	.113
Patriotism	.688	.462	.102
Tolerance (recoded)	.529	.063	.148
Pride in Political Achievements	-.121	.015	-.949
Pride in Historical Achievements	.226	.551	.595

Table 46: Rotated Component Matrix

The result of the first analysis is three meta factors. This is unfortunate, as it makes the graphic representation in a two-dimensional space very difficult. Looking at the rotated component matrix, the two factors explaining national pride seem to jump out. "Pride in Political Achievements" seems to be the only factor that clearly belong into the third factor, while "Pride in Historical Achievements" seems to be impossible to assign to any particular factor. This makes the interpretation of those factor more difficult and seems to be largely caused by the accepting the two-factor-solution of "National Pride" during the previous factor analysis.

To test this assumption, another factor analysis must be made, but this time taking the forced one-factor-solution of "National Pride" instead.

[52] For recoded factors, see digital files: ISSP Means V2.sav (SPSS Statistics Data Document)

	Component	
	1	2
Identification with the Community	.178	.518
National Belonging	.706	.506
Support for the own Nation	.452	.741
International Influence	.841	.126
Positive attitude towards Immigrants (recoded)	.703	.019
Negative attitude towards Immigrants	.771	.064
Patriotism	.749	.377
Tolerance (recoded)	.523	.059
National Pride	-.246	.857

Table 47: Rotated Component Matrix; Component 1: Political Factor; Component 2: Personal Factor

The rotated component matrix is seems to be much less ambiguous this time. The factors National Belonging, International Influence, Positive attitude towards Immigrants (recoded), Negative attitude towards Immigrants, Patriotism and Tolerance (recoded) seem to belong to the factor, as seen by the relatively high factor loading. Identification with the Community, Support for the own Nation and National Pride, on the other hand, seem to belong to the second factor. The consolidation of the factor National Pride led to the elimination of the third factor as well as a clear indication where this factor belongs. Normally, forcing a certain number of factor solutions is not advised, but in this case it is necessary to achieve meta factors that are unambiguous and simpler to evaluate.

Looking at the new factors, it appears that the first meta factor consists of factors that address political issues, such as immigration, tolerance and how geopolitical factors such as language and citizenship influence ones view on national identity. As such, the first factor describes the political view of the respondents in regards to their national identity and will be called the “Political Factor”. The second factor appears to be all about the personal relationship that a person may have with his own community and country, how much the respondent is willing to support it and the amount of pride he or she feels with regard to their nation. This addresses a much more personal view on national identity, that is not tied to any political factors. As such, the second meta factor will be called the “Personal Factor”.
These meta factors will make further interpretations much simpler and will also allow a graphic representation of clustered data, but on that in the respective sections.

4.4.1 Interpretation of the meta factors

Both meta factors are explained by their respective items. This means that these new factors will work very similarly to the old ones. When a person has a conservative view on politics, it means that all most of his or her scores of factors that are related to political matters, like International Influence or Immigrants, will be smaller than zero. Subsequently, the Political Meta Factor will have a negative score. Conversely, a liberal person will have a positive Political Meta Factor score.

The same logic applies to the Personal Meta Factor. A person that is very close to their country and community, shows a lot of national pride and identifies with their country on a personal level will have a negative score, whereas someone with a positive score will show far less pride in their country, potentially even shame, as well as little support or identification with it.

4.5 Applied Cluster Analysis[53]

The first step in the Cluster Analysis is to determine with how many clusters are present in this data and whether this data is suitable to divided into clusters in the first place.

4.5.1 TwoStep Cluster Analysis

This TwoStep Cluster Analysis suggests that two is the optimal number of clusters. This result is fair, but not perfect, whichever of the two Distance Criteria is picked [54]. This suggests that there is a distinction between the groups, but it is not pronounced enough to say with absolute certainty that we are dealing with clusters to begin with. The divisions looks different depending on which Distance Criterion is used. It appears that the Log-Likelihood method, however, delivers more plausible result. It is also in line with the cluster solutions of the Hierarchical Cluster Analysis. This is why the Log-Likelihood method will be the method of choice for this paper. In order for that Distance Criterion to be permissible, the variables must have a normal distribution. These graphs show that all of the factors have a distribution that is close to being normal[55]. While not optimal, it will have to do in this particular case.

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[53] For complete output, see digital files: Cluster.spv (SPSS Statistics Output Document)

[54] See Appendix: 2 TwoStep Cluster, p.6-7

[55] See Appendix: 1 Histograms, p.1-5

According to the TwoStep algorithm, around 29% of regions belong into one cluster and the remaining 71% to the other. There are no unassigned regions. Since the factor “national pride” is missing for all regions of Iceland the, they can not be included into the cluster analysis and are flagged as missing. The only way to include them would be to drop the factor from the entire analysis, which will lead to a different result. As such, Iceland will not be considered in this part of the analysis.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Liberal	156	67.2	69.6	69.6
	Conservative	68	29.3	30.4	100.0
	Total	224	96.6	100.0	
Missing	System	8	3.4		
Total		232	100.0		

Table 48: TwoStep Cluster (recoded) Descriptive Statistics

Visualizing the result using the original factors would be very impractical and difficult to interpret as every factor needs to be plotted against every other factor. This why is it simpler to plot the meta factors and use the cluster separation on those to see the cluster visualized in a two-dimensional space. This step is possible, because the two meta factors are explained by the original factors and thus the same principles apply to both. The two resulting cluster seem to be separating roughly around the origin of the coordinate system, suggesting that cluster one is predominantly occupied by regions with meta factor values above and close zero and the cluster two is for regions with meta factor values below zero[56].

As mentioned previously, low values of the meta factors means that on average the factor solutions of the regions is also low, suggesting that those regions are conservative, whereas those with high values are more liberal.

As such, the cluster including those countries and regions with higher than average meta factor scores will be called the “Liberal Cluster” and the other cluster will be called the “Conservative Cluster”.

[56] See Appendix: 2 TwoStep Cluster, 2.2 Log-Likelihood Distance Criterion, p.7

4.5.2 Hierarchical Cluster Analysis

Now that the amount of necessary clusters is determined and there is a general idea of how the regions are clustered, it is time to see whether the hierarchical cluster analysis supports this division.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Liberal	159	68.5	71.0	71.0
	Conservative	65	28.0	29.0	100.0
	Total	224	96.6	100.0	
Missing	System	8	3.4		
Total		232	100.0		

Table 49: Ward Method Cluster Descriptive Statistics

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Liberal	162	69.8	72.3	72.3
	Conservative	62	26.7	27.7	100.0
	Total	224	96.6	100.0	
Missing	System	8	3.4		
Total		232	100.0		

Table 50: Average Linkage Cluster Descriptive Statistics

Both the average linkage and ward linkage results are very close. The former groups 62 observations, which is roughly 28% into cluster one and the remaining 162 into cluster two, whereas the latter groups 68 observations, which is roughly around 30% of all observations into cluster one and the rest into cluster two [Tables 49 and 50]. When comparing the results with the TwoStep cluster algorithm, it appears that the average linkage method will have a somewhat smaller first cluster whereas the ward linkage and somewhat larger one. Both deviations are very minimal though and thus all three methods can be seen as giving the same result. This is also confirmed when looking at all three graphs side by side[57].

This division can also be interpreted from the resulting dendrograms[58]. In both graphs one can see that the whole sample splits into two major groups, supporting the two-cluster-solution.

[57] For dendrograms, see digital files: Cluster.spv (SPSS Statistics Output Document)

[58] See Appendix: 2 TwoStep Cluster, 2.2 Log-Likelihood Distance Criterion, p.7

5 Evaluation[59]

This section is dedicated to the evaluation of the data gained through all previous analyses. Here each country will be examined and compared to the others, both as a whole and divided into regions.

5.1 Countries

5.1.1 Belgium (BE)[60]

	Rank	Mean rank	Median rank
Identification with the Community	23	11.8889	10
National Belonging	18		
Support for the own Nation	13		
National Pride	10		
International Influence	18		
Positive attitude towards Immigrants (recoded)	10		
Negative attitude towards Immigrants	5		
Patriotism	5		
Tolerance (recoded)	5		
Political Factor	9		
Personal Factor	14		

Table 51: Belgium average ranks

On a national level, Belgium shows a slight tendency toward conservatism. National pride, their attitude towards immigrants and views on tolerance as well as patriotism yielded factor values that suggest that on average most respondents are agreeing with a conservative position towards the outside. Interestingly enough, their national belonging and support for their own nation are above average. This would mean that the respondents have feelings of national identity, especially when it comes to political decisions their country makes, but these feelings are not tied directly to their country.
The only factor that contradicts this pattern is their opinion on international influence. This may be the case due to Belgium being a developed country with plenty of foreign trade, which bring plenty of conveniences that the respondents are positively inclined towards.
Most regions are located in the second quadrant of the scatter plot, which means a comparatively liberal view on their country, but a conservative view when it comes to political decision.

[59] For scatter plot with all countries, see digital files: Graphs.spv (SPSS Statistics Output Document), total.
For total country means, see digital files: ISSP Evaluation Totals.sav (SPSS Statistics Data Document)

[60] For regional scatter plot, see Appendix: 4 Cluster Solutions, p.9

There are two outliers. One is the region Liege, whose respondents showed a conservative view on both personal as well as political factors. The second one is the Brussels Capital Region, which seems to be the exact opposite of the rest by having a score that is below average for personal factors and above average for political factors, suggesting that the respondents in the capital show a higher level of identification with their country, but have a liberal view on immigrants and political decisions. This comparative anomaly could be explained by this region being the capital and thus a higher proportion of immigrants and tourists, something that creates a liberal view towards the outside, making their national belonging their main way of identifying themselves.

Despite those slight internal fluctuations, all regions still belong in the first cluster. There may be one exception to the cluster-grouping, however. West-Flanders is being seen as belonging into the second cluster according to the TwoStep cluster analysis, whereas the hierarchical cluster analysis puts it into the first. This support the assumption that Belgium one of the more conservative countries within the liberal group.

5.1.2 Switzerland (CH)[61]

	Rank	Mean rank	Median rank
Identification with the Community	9	15	19
National Belonging	19		
Support for the own Nation	11		
National Pride	1		
International Influence	19		
Positive attitude towards Immigrants (recoded)	20		
Negative attitude towards Immigrants	15		
Patriotism	20		
Tolerance (recoded)	21		
Political Factor	22		
Personal Factor	2		

Table 52: Switzerland average ranks

Switzerland is very similar to the phenomenon seen in the Brussels Capital Region in Belgium. On average, the country is very liberal in its political opinion towards the outside, but takes immense pride in its country and nation, becoming its main point of identification.

[61] For regional scatter plot, see Appendix: 4 Cluster Solutions, p.9

It has the second smallest average factor score that describes their personal attitude towards their country and the second largest that describes their opinion regarding political affairs. This split is very well reflected in the factor scores, with the majority being well above average and the support for their own nation being barely above average, with only their identification with their community and national pride being below average.

The regional distribution is very narrow, all falling into the fourth quadrant. With all regions being in the first cluster, Switzerland is still a national with a liberal outlook, however one that displays the highest national pride and highest identification with their nation of their entire group.

5.1.3 Czech Republic (CZ)[62]

	Rank	Mean rank	Median rank
Identification with the Community	3	7.5556	7
National Belonging	6		
Support for the own Nation	8		
National Pride	17		
International Influence	6		
Positive attitude towards Immigrants (recoded)	7		
Negative attitude towards Immigrants	2		
Patriotism	12		
Tolerance (recoded)	7		
Political Factor	4		
Personal Factor	13		

Table 53: Czech Republic average ranks

The Czech Republic is hard to pin down when it comes to the respondents' identification their own nation. On the one hand, they exhibit a strong identification with their community, but on the other hand, their support for their nation seems to be rather average among all the nations and their feeling of national pride seems lacking. However, when it comes to their political view, it is one of the most conservative countries in this data set, with all contributing factors being well below average.
Their regional distribution mirrors this pattern very well. All regions are in the first or fourth quadrant, suggesting a uniformly conservative view on political issues across the entire country.

[62] For regional scatter plot, see Appendix: 4 Cluster Solutions, p.10

But on the horizontal vector they are fairly scattered, with the Vysocina and Usti regions displaying a higher feeling of national pride and belonging, the Central and South Bohemia, Liberec, Hradec Kralove and Olomouc regions being about average in their view and the remaining 6 regions showing a liberal view.

So unlike Switzerland or Belgium, the respondents harbour a conservative views towards the outside, but choose not to identify themselves with their country on a more personal level.

Once again though, the internal differences are relatively minor and all regions still belong into the second cluster, making it one of the conservative countries, especially when it comes to their view on political matters. There may be one exception, however, as the TwoStep algorithm suggests that Carlsbad belongs into the first cluster, whereas the hierarchical cluster analysis kept it in the second one. This may be an outlier due to bias or could be explained by high tourist activity in that area.

5.1.4 Germany (DE)[63]

	Rank	Mean rank	Median rank
Identification with the Community	12	17.4444	19
National Belonging	20		
Support for the own Nation	18		
National Pride	9		
International Influence	23		
Positive attitude towards Immigrants (recoded)	22		
Negative attitude towards Immigrants	19		
Patriotism	21		
Tolerance (recoded)	13		
Political Factor	23		
Personal Factor	9		

Table 54: Germany average ranks

Much like Switzerland, Germany has a drastically different views on the political and the personal side of national identity. Along with Switzerland, Germany has, on average, among the most liberal views on political topics, but are comparatively conservative in terms of personal identification with their country.

German regions mirror this structure, all except Bremen are positioned in closed proximity of the x-axis, giving us a range views on the political orientation of the country.

[63] For regional scatter plot, see Appendix: 4 Cluster Solutions, p.10

However, all regions are right of the y-axis, making all those different views still relatively liberal compared to other countries. The position around the a-axis suggests that the personal factors of national identity are relatively average in Germany. The only exception seems to be Bremen, which has a very low personal factor score, show high support for their community and a high national pride. This seems rather unusual. One could argue that Bremen being a Hansestadt has something to do with it, however, Hamburg does show the same pattern, suggesting that this is due to the sample taken from there.

The main contribution to the national identity of the German respondents is their personal relationship with their country, whereas most of their political views are very liberal, showing no favouritism toward the country itself.

All German regions are firmly within the first cluster, Bremen is the only exception, as the TwoStep cluster algorithm puts it into the second group while both hierarchical cluster algorithms which were used here keep it in the first group. Nevertheless, the data strongly suggests that that this is a country with liberal views.

5.1.5 Denmark (DK)[64]

	Rank	Mean rank	Median rank
Identification with the Community	19	14.6667	16
National Belonging	14		
Support for the own Nation	3		
National Pride	5		
International Influence	20		
Positive attitude towards Immigrants (recoded)	16		
Negative attitude towards Immigrants	17		
Patriotism	16		
Tolerance (recoded)	22		
Political Factor	17		
Personal Factor	5		

Table 56: Denmark average ranks

Much like the other Western European countries before, Denmark is a country with respondents who harbour liberal views on political factors, especially an accepting view on foreign influence and a lack of patriotic feelings, and show support for their country as well as a healthy dose of national pride.

[64] For regional scatter plot, see Appendix: 4 Cluster Solutions, p.11

Some regions, especially the Capital Region of Denmark appears to have respondents, who feel very strong about supporting their country and community, while showing only slightly above average liberalism for political factors, especially when it comes to accepting foreign influences. The respondents from the Central Region of Denmark are the other extreme within the country, showing only an average support for their country when compared to the entire sample, less personal identification with the country and a very liberal approach to political factors.
This suggest that, once again, the respondents from this country identify themselves with their country on a personal level, thus adopting a liberal point of view on political matters. All regions are in the first cluster, adding another West European country into its fold.

5.1.6 Estonia (EE)[65]

	Rank	Mean rank	Median rank
Identification with the Community	10	15.7778	14
National Belonging	21		
Support for the own Nation	22		
National Pride	21		
International Influence	14		
Positive attitude towards Immigrants (recoded)	13		
Negative attitude towards Immigrants	10		
Patriotism	7		
Tolerance (recoded)	24		
Political Factor	14		
Personal Factor	19		

Table 57: Estonia average ranks

Estonia turns out to be one of the more liberal countries in every respect. Much like the Czech Republic, Estonian respondents do not have a personal attachment with the country when it comes to their national identity, showing neither a lot support or pride. However, differently from the Czech Republic, their view on political matters turn out to be more liberal than average, less liberal compared to most western countries though, but more than most eastern ones.

[65] For regional scatter plot, see Appendix: 4 Cluster Solutions, p.11

The regional distribution explains the average score for the political factors. Three regions, South-, Central- and West-Estonia are located left of the y-axis, while North- and North-East-Estonia are located right of it, creating an average of close to 0. There is also a spread along the y-axis, but all values here are above average, attributing to the liberal view on political matters.

All this suggests that the respondents from Estonia do not show high levels of national identity, neither in a personal way, nor a political one. While the former one turns out to be common among Eastern European countries and can certainly be explained [reference to verdict], the latter one is more typical for western countries and has no immediately apparent reason behind it. It appears to be that the way national identity is viewed in this survey plays no major role for Estonian respondents.

All regions get assigned to the first cluster, confirming that this country is one among the liberal ones.

5.1.7 Spain (ES)[66]

	Rank	Mean rank	Median rank
Identification with the Community	7	18.5556	20
National Belonging	17		
Support for the own Nation	20		
National Pride	16		
International Influence	16		
Positive attitude towards Immigrants (recoded)	24		
Negative attitude towards Immigrants	20		
Patriotism	24		
Tolerance (recoded)	23		
Political Factor	20		
Personal Factor	16		

Table 58: Spain average ranks

Similarly to the other western countries, the respondents from Spain show a liberal approach toward political issues, with all values above average, but contrary to most other western countries, Spain shows slight liberalism with regard to the personal factors as well.

All regions are located in the first and fourth quadrant, thus showing that all regions, with Comunidad Valenciana being the only expection, show above average liberalism when it comes to political decisions of their country.

[66] For regional scatter plot, see Appendix: 4 Cluster Solutions, p.12

The only differences in opinion is whether certain political factors make someone feel like they belong to a nationality, but not enough to influence the overall opinion. There is, however, a range of opinions when it comes to the personal identification with the country. The majority of regions show an average view with regard to the personal factors, but some diverge. Extremadura and Madrid show an an above average support their own country and strong national pride, something that seems to be rather common for respondents from national capitals. On the other side, Cataluna, Cantabria, Pais Vasco and Navarra show a more liberal view on those factors.
Interestingly, these four regions are the only ones that do not feel as close to their own town, county and/or country compared to others, explaining their position on the scatter graph.
Thanks to those views, Spain has more in common with Estonia as opposed to other western countries in this sample, not showing a high level of national identity with regards to their country.
Needless to say, all regions are firmly within the first cluster, making the respondents from Spain some of the most liberal people in this data set.

5.1.8 Finland (FI)[67]

	Rank	Mean rank	Median rank
Identification with the Community	13	14.1111	14
National Belonging	23		
Support for the own Nation	7		
National Pride	7		
International Influence	17		
Positive attitude towards Immigrants (recoded)	9		
Negative attitude towards Immigrants	14		
Patriotism	17		
Tolerance (recoded)	20		
Political Factor	16		
Personal Factor	8		

Table 59: Finland average ranks

Finland is one of those countries that comes very close to being one of the averages that other countries are measured against. However, there is still a slight tendency towards the pattern laid out by previous Western European countries, but to not such an extreme as Germany or Switzerland.

[67] For regional scatter plot, see Appendix: 4 Cluster Solutions, p.12

On average, the respondents from Finland show a tendency towards liberalism with regard to political matters and exhibit a higher than average national pride.
In terms of regions, Central Finland and South Ostrabothnia are those closest to being the average reference point in this sample. Varsinais-Suomi, Uusimaa and Kanta-Haeme are very similar to the first two regions in terms of personal factors, namely all around the average with only minor deviations to below average in South Ostrabothnia, but show above average liberalism when it comes to political factors. The remaining region can be considered rather average in terms of their political with a slight tendency toward being liberal. However, these regions exhibit an above average sense of national pride and support for their nations, thus moving towards conservatism in terms of personal factors. This suggests that the people of Finland feel close to their country on a personal level and thus enjoy a liberal point of view from a political standpoint.
All Regions are counted towards the first cluster, thus showing a tendency towards liberalism, despite being located so closely to the average of this sample.

5.1.9 France (FR)[68]

	Rank	Mean rank	Median rank
Identification with the Community	5	10.3333	10
National Belonging	11		
Support for the own Nation	16		
National Pride	8		
International Influence	9		
Positive attitude towards Immigrants (recoded)	15		
Negative attitude towards Immigrants	11		
Patriotism	8		
Tolerance (recoded)	10		
Political Factor	11		
Personal Factor	7		

Table 60: France average ranks

France is one of countries that comes closest to being an average in this sample. This makes a proper evaluation difficult, as the only thing that can be said is that France is neither as liberal as other countries, nor is it as conservative.

[68] For regional scatter plot, see Appendix: 4 Cluster Solutions, p.13

Nevertheless, France is a western country and thus it adheres to certain patterns, however minor they may be. As such, a tendency toward national pride and identification can be observed. The opinions on political matters seem to be evenly spread, however.

In terms of regions, there is one glaring exception, however. Respondents from Corsica seem to have a very conservative view with regard to political issues as well as a very high degree of national pride and support for their country and community. This extreme case may be explained that Corsica is a island and as such has a smaller, but might more tightly knitted community, something that often leads to conservative thinking. Another issue is that Corsica has a rather small sample of nine respondents, so what we are witnessing here may be due to unintentional bias within the sample.

Due to those minor tendencies that can also be observed in other western countries, all French regions, except Corsica, belong in the first cluster group, though in many cases just barely, suggesting that France is politically one of the more conservative countries in Western Europe, all while having a similar degree of national pride and identification with their own country. Corsica is the only region that belongs into the second group, making it a very conservative region in all respects.

5.1.10 Great Britain (GB)[69]

	Rank	Mean rank	Median rank
Identification with the Community	22	10.2222	8
National Belonging	7		
Support for the own Nation	5		
National Pride	2		
International Influence	15		
Positive attitude towards Immigrants (recoded)	8		
Negative attitude towards Immigrants	4		
Patriotism	12		
Tolerance (recoded)	17		
Political Factor	15		
Personal Factor	4		

Table 61: Great Britain average ranks

Great Britain is a collection of countries that is marked by their high national pride in this sample when compared to other countries, to a point where is overshadows a rather weak identification with their community.

[69] For regional scatter plot, see Appendix: 4 Cluster Solutions, p.13

This is a stark contrast compared to their slightly above average tendencies liberalism with regard to political decisions.

When looking at the individual regions/countries, some may display less national pride than others. The West and East Midlands show considerably less pride in their country and community when compared to Wales, Greater London and especially London. However, even the Midlands show greater national pride than most other countries by comparison.

In terms of political factors, it averages out in total, but there is divergence between the different regions. Scotland, Greater London and the West and East Midlands show more liberalism with regard to political matters, whereas Wales and the rest of England have more conservative opinions about the matter.

Much akin to Germany and Switzerland, the main focus of national identity in Great Britain comes from national pride and strong identification with the country on a personal level and not from political regulations and circumstances.

This distribution paints a dilemma when it comes to assigning them to a cluster grouping. While the hierarchical cluster analysis puts them all into the first cluster, the TwoStep algorithm suggest that Wales and northern parts of England belong in the second cluster. This suggests that Great Britain is one of the most conservative countries in Western Europe, albeit more liberal than most other eastern countries.

5.1.11 Georgia (GE)[70]

	Rank	Mean rank	Median rank
Identification with the Community	1	3.5556	3
National Belonging	2		
Support for the own Nation	3		
National Pride	12		
International Influence	3		
Positive attitude towards Immigrants (recoded)	3		
Negative attitude towards Immigrants	6		
Patriotism	1		
Tolerance (recoded)	1		
Political Factor	3		
Personal Factor	6		

Table 62: Georgia average ranks

[70] For regional scatter plot, see Appendix: 4 Cluster Solutions, p.14

The respondents from Georgia appear to be comparatively conservative, showing a high degree of national pride and big support for their country and community. Most also support a conservative approach in terms of politics, leading to Georgia being one of the most conservative countries in this sample.

All regions, except one, show very strong identification with their country and most show great support for their community when compared to the rest of the sample. Samtskhe Javakheti is the one region that show only an average identification with their community and do not show particular pride or support for their country. However, similarly to other eastern countries, the comparatively low national pride is below average in all regions, except in Shida Qartli and Guria, regions that display very little pride. When it comes to political matters, all regions support a highly conservative point of view.

This lead to the fact that all but one region are set firmly in the second group, suggesting that Georgia is one of the more conservative countries, even when compared with others of their kind. Samtskhe Javakheti is the only region that was assigned to the first cluster by both cluster analyses. This may be an anomaly that could be explained through bias, or there may be another reason for the high tendencies toward liberalism in this region that are not immediately apparent.

5.1.12 Croatia (HR)[71]

	Rank	Mean rank	Median rank
Identification with the Community	6	8.1111	7
National Belonging	4		
Support for the own Nation	9		
National Pride	13		
International Influence	4		
Positive attitude towards Immigrants (recoded)	1		
Negative attitude towards Immigrants	7		
Patriotism	15		
Tolerance (recoded)	14		
Political Factor	10		
Personal Factor	22		

Table 63: Croatia average ranks

Croatia is more in line with the image painted by the Czech Republic.

The respondents seem to support conservative politics, while not displaying a high amount of pride or support for their own country.

[71] For regional scatter plot, see Appendix: 4 Cluster Solutions, p.14

In fact, this country displays national pride and support for their country that is well below average compared to the rest of the sample. When it comes to political factors, the respondents show a very conservative approach towards immigration as well as international influences and hold a traditional view on what it means to belong to a nation. On the flip side, respondents do not need any particular levels of pride in their country and show very few feelings of patriotism.

In terms of individual regions, all display a lack of pride in and identification with their country, with Lika and Banovina showing the most pride, which is still well above average within this sample. The opinions about political factors are more diverse. Lika and Banovina is a region that displays the more liberalism with regards to political factors. Dalmacija, on the other hand, seems to be the most conservative of all Croatian regions.

Curiously enough, all regions except Dalmacija are in the first cluster, suggesting that this country is more liberal than most other Eastern European countries. Dalmacija is in the second cluster and dos not differ significantly from the other regions. This means that along with Belgium and Great Britain, Croatia is very close to being grouped with other conservative countries and represents the very edge the the liberal group. At the end, despite being assigned to first cluster, Croatia shows a pattern that is indicative of eastern countries. Low national pride and belonging and appreciation of conservative politics show that the respondents do not feel a strong personal connections with their country, but wish to keep free from external influences for the most part.

5.1.13 Hungary (HU)[72]

	Rank	Mean rank	Median rank
Identification with the Community	15	14.7778	15
National Belonging	15		
Support for the own Nation	21		
National Pride	18		
International Influence	8		
Positive attitude towards Immigrants (recoded)	12		
Negative attitude towards Immigrants	21		
Patriotism	19		
Tolerance (recoded)	4		
Political Factor	7		
Personal Factor	11		

Table 64: Hungary average ranks

[72] For regional scatter plot, see Appendix: 4 Cluster Solutions, p.15

The data suggest that Hungry is in fact one of the more conservative countries in this sample, especially in their view regarding political decisions. When it comes to personal factors, the respondents seem to be an average in this sample, displaying neither particularly high nor low national pride or support for their own nation when compared to other countries. There is, however, a tendency towards conservative thinking.

On a regional level, there seems to be a rather even split. The North, North-Plain, West and South-Plain regions show a tendency towards a towards national less pride and less identification with their country, whereas the remaining four regions tend to feel a stronger connection with the country on a personal level.

Whatever the difference in their personal views might be, all regions are firmly positioned in the second and third quadrant, creating a strong conservative image with regards to political matters.

Once again, this is a pattern that one will come across when looking at a country in Eastern Europe, where the national identity largely stems from political decisions and keeping to themselves, as opposed to a personal connection one might find in the west.

All regions are assigned to the second cluster. However, the North, North-Plain, West, South-Plain and Central regions are not far away from regions in the second group, suggesting that while this is a conservative countries, there are certain tendencies towards a more liberal point of view.

5.1.14 Ireland (IE)[73]

	Rank	Mean rank	Median rank
Identification with the Community	21	17.1111	19
National Belonging	16		
Support for the own Nation	19		
National Pride	6		
International Influence	21		
Positive attitude towards Immigrants (recoded)	19		
Negative attitude towards Immigrants	23		
Patriotism	18		
Tolerance (recoded)	11		
Political Factor	18		
Personal Factor	10		

Table 65: Ireland average ranks

[73] For regional scatter plot, see Appendix: 4 Cluster Solutions, p.15

Returning to the west, an old pattern seems to return when regarding Ireland. The respondents from this country show strong support for liberal policies, while displaying tendencies towards national pride, despite not showing overwhelming support for their community or liking for their respective towns, counties and/or the country itself.
All regions display a very liberal point of view on foreign influences, immigration and other the political factors. Where opinions seem to diverge is with regard to personal factors. The South-East seems to harbour a more liberal view, not identifying itself with or showing much support for their country and community. The Border region and the South-West seem to in line with the average view of the sample. The remaining regions, however, show stronger tendencies towards a conservative view, especially the West, which is the region that displays strong national pride, even among other conservative regions, and shows more support for their country when compared to other Irish regions, despite having one of the most liberal views in the sample.
Overall though, Ireland conforms with the patter established in the west that most of the national identity stems from a personal attachment to the country and community.
Despite some internal inconsistencies, all Irish regions belong to the first cluster, joining the fold with other liberal countries.

5.1.15 Iceland (IS)

	Rank	Mean rank	Median rank
Identification with the Community	18	15.375	14
National Belonging	10		
Support for the own Nation	14		
National Pride	n.a.		
International Influence	13		
Positive attitude towards Immigrants (recoded)	21		
Negative attitude towards Immigrants	24		
Patriotism	14		
Tolerance (recoded)	9		
Political Factor	n.a.		
Personal Factor	n.a.		

Table 66: Iceland average ranks

Due to a lot of missing values, and thus the missing factor National Pride, a graphic representation and direct comparison with other countries is not possible for Iceland.
However, when comparing the other factors, this country seems to be close to the sample average in many respects.

The different regions show minor tendencies towards liberal view on immigration an foreign influences. Most regions also do not show particular support or identification with their country, with the Northwestern Region being the only exception. This gives Iceland the image of a comparatively liberal country and all regions, aside of possibly the aforementioned Northwestern Region would most likely belong into the first cluster.

5.1.16 Lithuania (LT)[74]

	Rank	Mean rank	Median rank
Identification with the Community	20	13.6667	14
National Belonging	9		
Support for the own Nation	17		
National Pride	20		
International Influence	12		
Positive attitude towards Immigrants (recoded)	14		
Negative attitude towards Immigrants	18		
Patriotism	11		
Tolerance (recoded)	2		
Political Factor	8		
Personal Factor	20		

Table 67: Lithuania average ranks

The second of the three Baltic states shows a pattern that is similar to other eastern countries. Lithuania shows tendencies towards conservatism with regard to political matters, all while displaying very little national pride, identification of support for their country. However, many still seem to have a more traditional view of it means to belong to a nation, valuing place of birth, ancestry and language above the community they live in.

On a regional level, Utena is the only region that shows a liberal approach to political issues, especially with regard to international influence and whether legal matters like place of birth or citizenship makes someone belong to a nation. All other regions are more conservative, especially Telsiai, which appears to be the most conservative on this matter. In terms of personal factors, Kaunas, Marijampoe and Taurage are about average in their view.

All other regions have increasingly less national pride and identification, with once again Utena being the one with the lowest personal identification with the country.

[74] For regional scatter plot, see Appendix: 4 Cluster Solutions, p.16

Unlike Estonia, Lithuanian respondents show a more conservative view towards political matters and do not identify themselves though a personal connection to their country.

Given their predominantly liberal views, all regions are in the first cluster. Kaunas is the only exception, being put into the second cluster by the TwoStep algorithm and the Ward linkage method, suggesting that all region, bar Utena, are close to countries of the second cluster grouping. This makes Lithuania, much like Estonia, one among the conservative countries in the first cluster and somewhat of an outlier among eastern countries, which are predominantly found in the second cluster.

5.1.17 Latvia (LV)[75]

	Rank	Mean rank	Median rank
Identification with the Community	17	12.3333	11
National Belonging	12		
Support for the own Nation	23		
National Pride	23		
International Influence	5		
Positive attitude towards Immigrants (recoded)	11		
Negative attitude towards Immigrants	8		
Patriotism	4		
Tolerance (recoded)	8		
Political Factor	5		
Personal Factor	23		

Table 68: Latvia average ranks

Latvia is the last of he three Baltic states. It is very similar to Lithuania in terms of its values and polarized to a similar extend as in Germany, although with reversed loadings. There is a very conservative view on political matters and extremely low national pride, identification and support.

The regions are all within the second quadrant. There is a difference between the regions in how liberal they see the personal factors of national identity, with Latgale and Riga being the most liberal, and Vidzeme and Zemgale being the most conservative in the country. However that spread is far less relevant when compared to the rest of the data set, because even the most “conservative” region is more liberal in their views than most others.

[75] For regional scatter plot, see Appendix: 4 Cluster Solutions, p.16

There is also a minor spread in terms of political factors, but once again, all of them are conservative when compared to other countries, with Latale being the most liberal one again.

Latvia repeats the pattern regarding their national identity set by other eastern countries before it.

The regions seem to be located on the edge between both clusters, seeing as Riga, Kurzeme, Zemgale and Latgale belong to cluster one, while Pieriga and Vizeme belong to he second. In terms of how low the identification with the country is, all Latvian regions would indeed to be first cluster, but this gets balanced out by conservative views when it comes to politics.

5.1.18 Norway (NO)[76]

	Rank	Mean rank	Median rank
Identification with the Community	11	13.6667	13
National Belonging	13		
Support for the own Nation	6		
National Pride	4		
International Influence	22		
Positive attitude towards Immigrants (recoded)	18		
Negative attitude towards Immigrants	12		
Patriotism	22		
Tolerance (recoded)	15		
Political Factor	19		
Personal Factor	3		

Table 69: Norway average ranks

The data of Norway is very similar to that of Germany and Switzerland, with a very liberal view on political matters, but also very high national pride and support for their country. National pride in particular seems to stand out in Norway.

The regional view on political factors is very similar, with the Central East being the only outlier with an even more liberal view on it. Personal factors have somewhat of a spread within the country with the Central East being the most liberal and the North the most conservative. However, when compared to the whole sample, all regions are show more national pride and support for their country than most others.

[76] For regional scatter plot, see Appendix: 4 Cluster Solutions, p.17

Norway is one of those western countries that gain a national identity though a personal connection to their country and community, leaving space for a liberal political point view.
Given how liberal the respondents in Norway see all the various political matters, it is no wonder that all regions are in the first cluster, much like Germany and Switzerland.

5.1.19 Portugal (PT)[77]

	Rank	Mean rank	Median rank
Identification with the Community	4	12.8889	12
National Belonging	8		
Support for the own Nation	12		
National Pride	22		
International Influence	10		
Positive attitude towards Immigrants (recoded)	23		
Negative attitude towards Immigrants	16		
Patriotism	9		
Tolerance (recoded)	12		
Political Factor	13		
Personal Factor	12		

Table 70: Portugal average ranks

Much like France, Portugal is very close to being one of the averages within this sample. On average, neither political, nor personal factors stand out.
When regarding them separately, the various regions tend to show low national pride, which is balanced out by a relatively strong identification with their respective communities. Their view on immigration is also more liberal than in many other countries, with the North region and Algarve being the most conservative ones in this country. All other factors are close to average and form the measure that others a measured against.
All regions are close to the coordinate origin, with the centre of Portugal and Lisbon showing less national pride and the centre also showing less identification with their country than other regions.
Much like France, it is difficult to pin down the respondents from a country that shows average values in all its factors.

[77] For regional scatter plot, see Appendix: 4 Cluster Solutions, p.17

They do not feel the same closeness to their country on a personal level as German or Swiss respondents may, but they are closer to their country than most respondents from eastern country. The opposite is true for political factors, where they are more liberal than most eastern countries, but still draw more national identity from political factors than most western countries.

Much like France, despite being an average in this sample, all regions are in the first cluster, showing a tendency towards liberalism.

5.1.20 Russia (RU)[78]

	Rank	Mean rank	Median rank
Identification with the Community	24	8	3
National Belonging	1		
Support for the own Nation	2		
National Pride	15		
International Influence	2		
Positive attitude towards Immigrants (recoded)	6		
Negative attitude towards Immigrants	1		
Patriotism	3		
Tolerance (recoded)	18		
Political Factor	1		
Personal Factor	18		

Table 71: Russia average ranks

Arriving on the other end of the spectrum, there is Russia. A country that shows probably the single most conservative approach to political matters of all other countries in this sample, all while showing little identification with their community and national pride.

There is not much difference between the different regions in terms of personal factors. Most are close to the x-axis, with only the Far East and the Ural region showing less national pride and identification with their country than the other regions. However, this display of liberalism is dwarfed by the very conservative view on political matters, such as a dislike towards immigration and a dislike of foreign influences. Interestingly enough, despite their low identification with their country, all regions show very strong support for their communities.

[78] For regional scatter plot, see Appendix: 4 Cluster Solutions, p.18

Russian respondents seem to have a very high level of national identity tied to their political views, in a sense that they wish to avoid external influences to prefer that which makes them “Russian”, and not from a personal connection to the country or community.

Due to such a conservative view on political matters, all Russian regions are firmly within the second cluster, close to Georgia.

5.1.21 Sweden (SE)[79]

	Rank	Mean rank	Median rank
Identification with the Community	16	17.5556	19
National Belonging	24		
Support for the own Nation	15		
National Pride	11		
International Influence	24		
Positive attitude towards Immigrants (recoded)	4		
Negative attitude towards Immigrants	22		
Patriotism	23		
Tolerance (recoded)	19		
Political Factor	21		
Personal Factor	15		

Table 72: Sweden average ranks

Sweden appears to be one of the most liberal countries in the data set. All respondents display a highly liberal view on political matters, an average national pride, which is eclipsed by a comparatively low support their communities and low identification with their countries.

All except one region are in the first quadrant, with the Middle Norrland being the most politically conservative region within Sweden, but still one of the most liberal in the whole data set. The only outlier appears to be Smaland and the island, which displays a higher degree of national pride than other Swedish regions. This can be explained by looking at the location of this region. It is an island of the shore of Sweden and located between it and Russia. This may have led to a higher measure of national pride due to the proximity to country that is culturally different, but a may also be due to the tightly knitted communities that a island tends to produce.

[79] For regional scatter plot, see Appendix: 4 Cluster Solutions, p.18

Showing less personal connections to their country and not gaining any notable identity through preserving their own nation from the outside, it seems that the concept of national identity, as viewed from the point of view of this survey, is fairly insignificant to the Swedish respondents.
All Swedish regions are firmly within the first cluster group as one of the most liberal countries in this sample.

5.1.22 Slovenia (SI)[80]

	Rank	Mean rank	Median rank
Identification with the Community	14	16.2222	16
National Belonging	22		
Support for the own Nation	24		
National Pride	19		
International Influence	11		
Positive attitude towards Immigrants (recoded)	17		
Negative attitude towards Immigrants	13		
Patriotism	10		
Tolerance (recoded)	16		
Political Factor	12		
Personal Factor	21		

Table 73: Slovenia average ranks

On average, Slovenia appears to be a comparatively liberal country. While the identification with their community is average for this sample, both the support for their respective communities and national pride seems to be lacking, which is en par with other Eastern European countries. Unlike other eastern countries however, respondents from Slovenia seemed to favour a liberal approach to politics.
All regions have an above average score on their personal factors, with Goriska and Kraska being the most conservative regions and Podravska being the most liberal one. The only major outlier is Dolenjska with a rather conservative opinion about political factors, even when compared to the entire sample.
Similarly to the other eastern countries, the main source of national identity stems from preventing outside influences as opposed to feeling close to the country in question.

[80] For regional scatter plot, see Appendix: 4 Cluster Solutions, p.19

As a result, Dolenjska is the only Slovenian region that is in the second cluster, all others being assigned to the first.

5.1.23 Slovakia (SK)[81]

	Rank	Mean rank	Median rank
Identification with the Community	8	6.4444	6
National Belonging	5		
Support for the own Nation	10		
National Pride	14		
International Influence	7		
Positive attitude towards Immigrants (recoded)	2		
Negative attitude towards Immigrants	3		
Patriotism	6		
Tolerance (recoded)	3		
Political Factor	3		
Personal Factor	17		

Table 74: Slovakia average ranks

In comparison with Slovenia, Slovakia looks like a return to norm among the eastern countries in this sample with very conservative opinions about political matters and a lack of national pride and only average support for and identification with the country.
The regions themselves can be divided into two groups. The first one consist of three regions, namely Presov, Kosice and Trencin county, show a higher degree of support for their country as well as somewhat higher degree of national pride. The second group, which consists of the remaining regions, shows less support for their country as well as a lesser degree of national pride. All regions, however, with Nitra county being the sole exception, show a comparatively high degree of identification with their country.
There is not much difference between the regions when it comes to their view on political matters, all of them showing a comparatively high degree of conservatism.
Just as Slovenia, the focal point around which the national identity is built is the uniqueness of the nation, which the respondents wish to preserve, something that is shown by a conservative view towards outside influences.
Due to their conservative views on political issues, all Slovakian regions are in the second cluster, being one of the more conservative countries in general.

[81] For regional scatter plot, see Appendix: 4 Cluster Solutions, p.19

5.1.24 Turkey (TR)[82]

	Rank	Mean rank	Median rank
Identification with the Community	2	3.4444	3
National Belonging	3		
Support for the own Nation	1		
National Pride	3		
International Influence	1		
Positive attitude towards Immigrants (recoded)	5		
Negative attitude towards Immigrants	9		
Patriotism	1		
Tolerance (recoded)	6		
Political Factor	6		
Personal Factor	1		

Table 75: Turkey average ranks

Perhaps unsurprisingly, Turkey turns out to be the most conservative country by quite a margin. Unlike Russia or Georgia, which showed a liberal view on personal factors, despite being politically conservative, Turkey is conservative all the way. This country displays among the highest national pride and identification in this data set, along with showing a lot of support for their community. Of all countries, Turkey seems to be least welcoming to immigrants and foreign influences.

The regions themselves are fairly close to each other. North Eastern Anatolia is the only major outlier here, being more welcome towards immigrants and foreign influences, but not enough to be considered liberal. Southeastern and Central Eastern Anatolia, on the other hand, display uncharacteristically low national pride and support for their communities.

Despite those minor variances, Turkish respondents display very high levels of national identity, both through a personal connection with the country as well as by the conservative view towards political topics, preferring to keep to themselves.

The reason why Anatolia as a whole seems to be a bit of an outlier in Turkey is not immediately apparent. However, those differences were enough to secure Southeastern and Central Eastern Anatolia a place in the first cluster group. Northeastern Anatolia gets assigned into the first cluster along by the Average Linkage method only.

The remaining regions, however, are firmly within the second cluster as probably the most conservative regions in in this sample.

[82] For regional scatter plot, see Appendix: 4 Cluster Solutions, p.20

6 Verdict

Looking broadly at the results, two major groups pattern becomes apparent: respondents that identify themselves with their country and community on a personal level. For those people, language and origin does not seem to be relevant. These people value the community they live in and show support for their country, thus becoming the focal point for their identification. In the eyes of those people, you do not need to be born in their country to be part of it. It is this kind of openness that leads these people to have a very liberal outlook on political matters welcoming foreign influences and generally showing a positive attitude towards immigrants.

The second group are those respondents that show little personal connection with their country and community but instead identify themselves though the comparative perceived of their nation and wish to preserve it. This lead the people to adopt a very traditional and conservative outlook, supporting the view that one must be born in a country to be truly a part of it. As such, respondents from these countries tend to show little favour towards foreign influences and are not particularly welcoming towards immigration. To put it figuratively, the former group tends to follow the spirit of the nation, whereas the latter tends follow the letter of it.

Western countries are mainly found in the fist group. Switzerland, Germany, Denmark, Finland, Ireland, Norway and Portugal are the prime examples of countries that gain show a great deal of national identity through their connection with their communities and keep an open mind about immigration. These countries can generally be viewed as being very liberal in their thinking, not bound by the idea of nationalities in a traditional sense.

Within this liberal group, there is are some variations, however. Respondents from Spain and Sweden show the same openness towards immigrants and outside influences, but when compared to countries like Germany or Switzerland, they do not how the same level of connection with their communities either. It appears that national identity, the way it is defined by this survey, seems to be inconsequential to these people. On the other side, there are Belgium, France and Great Britain. Respondents from those countries showed more of a conservative way of thinking when it comes to outside influences, while sharing the same connection with their countries and communities like the other respondents in this group. This is especially surprising, since Great Britain and France were colonial powers and as such should be accustomed to foreign influences. But then again, maybe it was those foreign influences that made the people so conservative in the first place.

Despite some internal variation, it is apparent that those countries share the same liberal view of what it means to be part of a nation, displaying a comparatively high tolerance towards immigrants, enjoying foreign influences through imports and generally not believing that political dealing like citizenship or other factors like language, place of birth or time lived in a country makes someone part of nationality.

It may be possible to explain this phenomenon with recent historical and political development in Europe. The western part of Europe is, for the most part, financially stable with very little political unrest. Despite the ravages of the second world war and the division during the Cold War, this part of Europe developed into a prosperous territory. Affordable travel and mass communication and an increasing exposure to people from outside their own nations has conditioned those countries towards the outside and led to a more accepting society with liberal views on what it means to be part of a nation.

Meanwhile, things are almost diametrically opposed in the east of Europe. Respondents from those countries are almost universally characterized by a conservative view on foreign policies compared to the west. For those people, being part of their nation means to be born within, putting much stock in a formal way of belonging. As such, immigrants and foreign influences are usually viewed in a more negative light. In the eyes of inhabitants of those countries, allowing these influences into their country would diminish their own identity. The uniqueness of their countries has become the focal point for their feelings of national identity.
This pattern can be observed in the Czech Republic, Georgia, Hungary, Russia and Slovakia. Even though Croatia was assigned to the first cluster in all but one region, they show a very similar pattern as other eastern countries. It is worth noting that after the second world war, those countries were part of the East bloc[reference]. As such, their development was large influenced and shaped by the conservative values of the Soviet Union and despite being disbanded, the the USSR has left its marks on those societies. They were much slower in accepting the internal views on their western counterparts, some even feeling threatened for foreign influences. This could explain why many respondents harbour such a conservative view on what it means to be part of a nation.
Although not part of this development, Turkey is perhaps the most conservative country in this sample, albeit but for different reasons. Conservatism in Turkey is primarily influenced by political Islam [reference], making this country a bit of an

outlier in this sample, despite counting as being part of Europe, at least in a geographical sense.

There are three notable outliers among the former Eastern Bloc, namely the Baltic states. Despite showing a similar pattern to other countries in Eastern Europe, the respondents seem to be more accepting of a liberal view that is more common in the west. Croatia and Slovenia is in a similar position. In both cases, all but one region are assigned to the first cluster, making them comparatively liberal countries when compared to their neighbours. In the case of Croatia, one possible explanation would be tourism, as it would help a more conservative country overcome the dislike for foreign influences.

The unique position that the Baltic states, Slovenia and even Croatia find themselves in may be indicative of a larger trend, that may become more prominent as the time goes on, with more and more countries leaving behind the old ways and adapting a more liberal outlook on what it means to be part of a nation.

6.1 Critical Evaluation

While the data yielded identifiable results in the end, this whole analysis was not without its grievances. The greatest criticism would be directed towards the data set itself. Despite being directed by ISSP, the surveys were conducted by researchers of the respective countries and in accordance to regulations within those countries. This has led to a very heterogeneous data set, and thus a very unwieldy one. Many variables that despite the same thing were different for each participating country. A very prominent example of that is the variable that describes the regions within each country. This sort of separation makes a regional analysis difficult to accomplish. While this is less of an issue in an exploratory analysis such as this, the real trouble of the heterogeneity will become apparent when moving on to an inductive analysis. Factors, that are unique to their respective countries like currency, religious beliefs and political involvement make a direct comparison between countries difficult.

The division of each country into regions represents another problem. Countries like Norway or Ireland are seemingly divided arbitrarily into generic regions only characterized by their cardinal direction makes the identification of said regions very difficult. On the other side of the spectrum there are countries like Sweden and France,

which are divided into the smallest regions possible, leading to many regions only having around three respondents, making any sort of analysis lose its credibility.

A more consistent approach, such the division according the the NUTS Level 1 or Level 2, would simplify the identification of certain regions and create an easier comparison between them.
Lastly, there is the ever-important question of the reliability and validity of the data set. With only around 1000 to 2000 respondents per country, thus only around 100-200 respondents per region, is may be questionable whether the results found in this paper can be applied to the general public at all. This is not be an issue, however, it would require additional effort to prove or disprove that claim, something that may not be necessary in a bigger sample. This last point is not something that can be influenced easily, however, and to its credit, this data set appears to be well populated.

References

[1] Wikipedia. National identity, para.1. Article version: 9 September 2017. URL: https://en.wikipedia.org/wiki/National_identity. Original source: *Ashmore, Richard; Jussim, Lee; Wilder, David (2001). Social Identity, Intergroup Conflict, and Conflict Reduction. USA: Oxford University Press. pp. 74–75*

[2] Quote: Wikipedia. National identity, para.1, l.4. Article version: 9 September 2017. URL: https://en.wikipedia.org/wiki/National_identity. Original source: *Lee, Yoonmi (2012). Modern Education, Textbooks, and the Image of the Nation: Politics and Modernization and Nationalism in Korean Education. Routledge. p. 29.*

[3] Wikipedia. National identity, Formation of national identity. Article version: 9 September 2017. URL: https://en.wikipedia.org/wiki/National_identity. Original source: *Anderson, Benedict (1991). Imagined Communities: reflections on the origin and spread of nationalism. Verso. p. 133.*

[4] Portland State University. Newsom. Psy 510/610 Structural Equation Modeling, p.1, para.2. Winter 2017. URL: http://web.pdx.edu/~newsomj/semclass/ho_latent.pdf. Accessed: September 2017

[5] Quote: ISSP Website. About ISSP, The International Social Survey Programme, para.1. URL: http://www.issp.org/about-issp/. Accessed: September 2017

[6] ISSP Website. Member States, Our Members. URL: http://www.issp.org/members/member-states/. Accessed: September 2017

[7] Quote: GESIS Leibnitz-Institut für Sozialwissenschaften. Modules, National Identity, para.1. URL: https://www.gesis.org/issp/modules/issp-modules-by-topic/national-identity/. Accessed: October 2017

[8] Quote: GESIS Leibnitz-Institut für Sozialwissenschaften. Modules, National Identity, para.2. URL: https://www.gesis.org/issp/modules/issp-modules-by-topic/national-identity/. Accessed: October 2017

[9] Wikipedia. GESIS-Leibnitz Institute for the Social Sciences, Data collection. Article version: 16 June 2017. URL: https://en.wikipedia.org/wiki/GESIS_%E2%80%93_Leibniz_Institute_for_the_Social_Sciences#Data_collection

[10] GESIS Leibnitz-Institut für Sozialwissenschaften. ISSP 2013-"National Identity III"-ZA No. 5950. Report on Questionnaire Development (PDF), p.3. URL: https://dbk.gesis.org/dbksearch/file.asp?file=ZA5950_ NationalIdentityCompilationISSP.pdf.

[11] GESIS Leibnitz-Institut für Sozialwissenschaften. ISSP 2013-"National Identity III"-ZA No. 5950. Report on Questionnaire Development (PDF), p.6, table 2. Form Adjusted. URL: https://dbk.gesis.org/dbksearch/file.asp?file=ZA5950_NationalIdentityCompilationISSP.pdf.

[12] GESIS Leibnitz-Institut für Sozialwissenschaften. ISSP 2013-"National Identity III"-ZA No. 5950. Report on Questionnaire Development (PDF), p.4, para.3. URL: https://dbk.gesis.org/dbksearch/file.asp?file=ZA5950_ NationalIdentityCompilationISSP.pdf.

[13] GESIS Leibnitz-Institut für Sozialwissenschaften. ISSP 2013-"National Identity III"-ZA No. 5950. Report on Questionnaire Development (PDF), pp.8-11. URL: https://dbk.gesis.org/dbksearch/file.asp?file=ZA5950_ NationalIdentityCompilationISSP.pdf.

[14] GESIS Leibnitz-Institut für Sozialwissenschaften. ISSP 2013-"National Identity III"-ZA No. 5950. Report on Questionnaire Development (PDF), p.14, Voting Result. Form adjusted. URL: https://dbk.gesis.org/ dbksearch/file.asp?file=ZA5950_NationalIdentityCompilationISSP.pdf.

[15] GESIS Leibnitz-Institut für Sozialwissenschaften. ISSP 2013-"National Identity III"-ZA No. 5950. Overview on questions, variables and replications (PDF). URL: https://dbk.gesis.org/dbksearch/file.asp?file=ZA5950_overview.pdf.

[16] For short variable definition, see digital files: ISSP National Identity III (adjusted).sav (SPSS Statistics Data Document), variable: V5-V70, Labels. For detailed variable report, see GESIS Data Archive ISSP 2013 variable report (codebook) (PDF), URL: https://dbk.gesis.org/dbksearch/download.asp?file=ZA5950_cdb.pdf

[17] GESIS Leibnitz-Institut für Sozialwissenschaften. ISSP 2013-"National Identity III"-ZA No. 5950. ISSP 2013 source questionnaire (PDF). URL: https://dbk.gesis.org/dbksearch/file.asp?file=ZA5950_bq.pdf.

[18] For descriptive statistics on each individual country, see digital files: Descriptive Statistics.spv (SPSS Statistics Output Document)

[20] Yong, Pearce (2013). A Beginner's Guide to Factor Analysis: Focusing on Exploratory Factor Analysis. What is Factor Analysis, p.80, para.1-3. Published in: Tutorials in Quantitative Methods for Psychology, Vol.9(2), p.79-94, 2013. URL: http://www.tqmp.org/RegularArticles/vol09-2/p079/p079.pdf

[21] Williams et al. (2012). Exploratory factor analysis: A five-step guide for novices. Types of Factor Analysis, p.3. Published in: Journal of Emergency Primary Health Care (JEPHC), Vol.8, Issue 3, 2010 - Article 990399.
URL: http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.414.4818&rep=rep1&type=pdf

[22] Cornish (2007). Statistics: 3.3 Factor Analysis. Assumptions, p.1. URL: http://www.statstutor.ac.uk/resources/
uploaded/factoranalysis.pdf.

[23] UCLA-Institute for Digital Research and Education. WHAT DOES CRONBACH'S ALPHA MEAN? SPSS FAQ, para.1. URL: https://stats.idre.ucla.edu/spss/faq/what-does-cronbachs-alpha-mean/. Accessed: October 2017

[24] University of Virginia Library Research Data Services + Sciences. Using and Interpreting Cronbach's Alpha, para.2. URL: http://data.library.virginia.edu/using-and-interpreting-cronbachs-alpha/. Accessed: October 2017

[25] UCLA-Institute for Digital Research and Education. WHAT DOES CRONBACH'S ALPHA MEAN? SPSS FAQ, equation 1. URL: https://stats.idre.ucla.edu/spss/faq/what-does-cronbachs-alpha-mean/. Accessed: October 2017

[26] University of Virginia Library Research Data Services + Sciences. Using and Interpreting Cronbach's Alpha, equation 2. URL: http://data.library.virginia.edu/using-and-interpreting-cronbachs-alpha/. Accessed: October 2017

[27] University of Virginia Library Research Data Services + Sciences. Using and Interpreting Cronbach's Alpha, para.4. URL: http://data.library.virginia.edu/using-and-interpreting-cronbachs-alpha/. Accessed: October 2017

[28] University of Virginia Library Research Data Services + Sciences. Using and Interpreting Cronbach's Alpha, para.5. URL: http://data.library.virginia.edu/using-and-interpreting-cronbachs-alpha/. Accessed: October 2017

[29] Tavakol, Dennick (2011). Making sense of Cronbach's alpha. Numerical values of alpha p.54. URL: https://www.ijme.net/archive/2/cronbachs-alpha.pdf.

[30] This section is based on the lessons made available by PennState Eberly College of Science for their STAT 505 module (Applied Multivariate Statistical Analysis). URL: https://onlinecourses.science.psu.edu/stat505/node/51. Accessed: September 2017.

[31] Cliff (1988). The Eigenvalues-Greater-Than-One Rule and the Reliability of Components. Kaiser (1960) Rationale, p.276-277. Published in: Psychological Bulletin, Vol.103, No.2, p.276-279, 1988. URL: http://www.rc.usf.edu/~jdorio/FA/Cliff%20(1988)%20The%20Eigenvalues-Greater-Than-One%20Rule%20and%20the%20Reliability%20of%20Components.pdf

[32] Rahn, PhD. Factor Analysis: A Short Introduction, Part 4-How many factors should I find? Published on: The Analysis Factor. URL: http://www.theanalysisfactor.com/factor-analysis-how-many-factors/. Accessed: September 2017.

[33] Rahn, PhD. Factor Analysis: A Short Introduction, Part 2-Rotations. Published on: The Analysis Factor. URL: http://www.theanalysisfactor.com/rotations-factor-analysis/. Accessed: September 2017.

[35] Osborne, University of Louisville (2015). What is Rotating in Exploratory Factor Analysis? Different types of rotations, p.4-5. Published in: Practical Assessment, Research & Evaluation, Vol.20, No.2, January 2015. URL: http://pareonline.net/getvn.asp?v=20&n=2

[37] This section is based on the guide made available by IBM regarding the TwoStep cluster analysis in SPSS. URL: https://www.ibm.com/support/knowledgecenter/es/SSLVMB_20.0.0/com.ibm.spss.statistics.help/alg_twostep.htm. Accessed: September 2017.

[38] Wikipedia - Euclidean Distance, para.1. Version: 19 September 2017. URL: https://en.wikipedia.org/wiki/Euclidean_distance

[40] Yim, Ramdeen, School of Psychology, University of Ottawa (2015). Hierarchical Cluster Analysis, p.9. Published in TQMP, Vol.11, No. 1, 2015. URL: http://www.tqmp.org/RegularArticles/vol11-1/p008/p008.pdf

[41] The Stanford Ntural Language Processing Group. Hierarchical agglomerative clustering, para.1.
URL: ttps://nlp.stanford.edu/IR-book/html/htmledition/divisive-clustering-1.html. Published by: Cambridge University Press, 2008.

[42] PennState Eberly College of Science. 14.4-Agglomerative Hierarchical Clustering, para.4. URL: https://onlinecourses.science.psu.edu/stat505/node/143. Accessed: September 2017.

[43] The Pennsylvania State University, 2004. Cluster Analysis, para.4. URL: http://sites.stat.psu.edu/~ajw13/
stat505/fa06/19_cluster/09_cluster_wards.html. Accessed: October 2017.

[44] Wikipedia. Total sum of squares, equation 1. Version: 2 July 2017. URL: https://en.wikipedia.org/wiki/
Total_sum_of_squares

[45] Carnegie Mellon University. 2.1 Ward's method, p.3. URL: http://www.stat.cmu.edu/~cshalizi/350/lectures/08/
lecture-08.pdf. Accessed: October 2017.

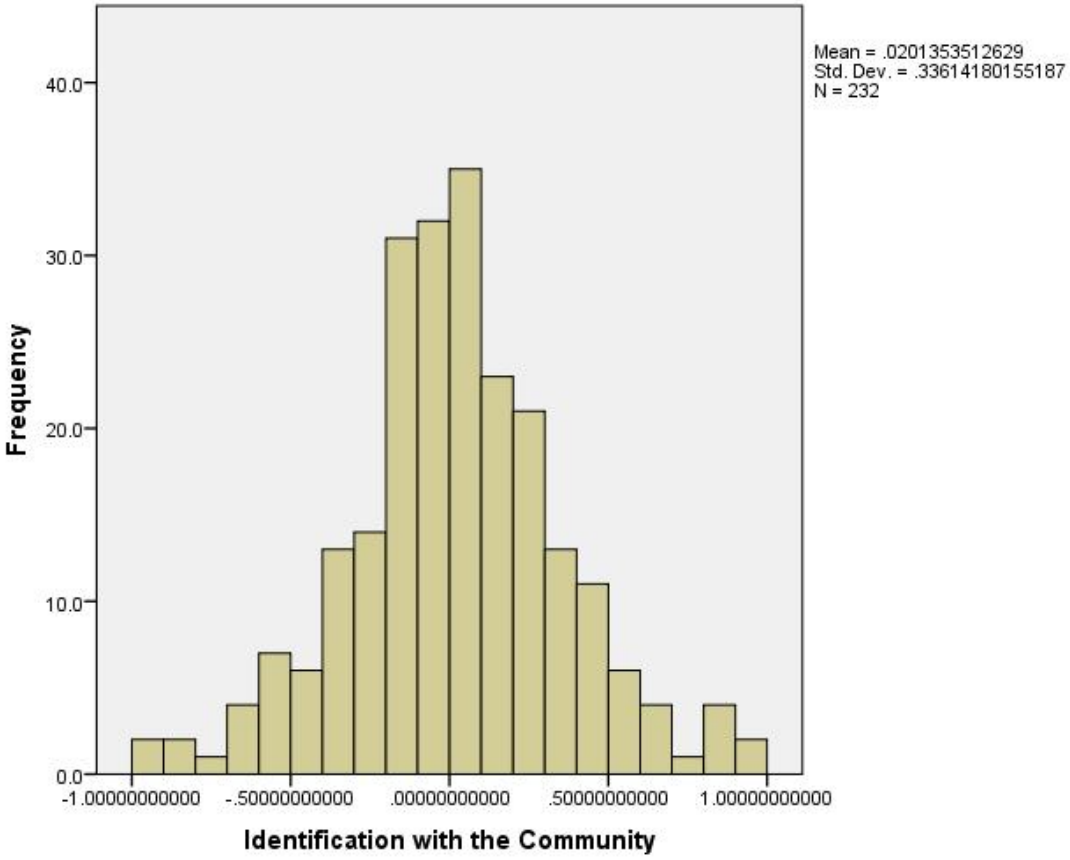
[48] Wikipedia. Nomenclature of Territorial Units for Statistics. Version: 31 March 2017. URL: https://en.wikipedia.org/wiki/Nomenclature_of_Territorial_Units_for_Statistics

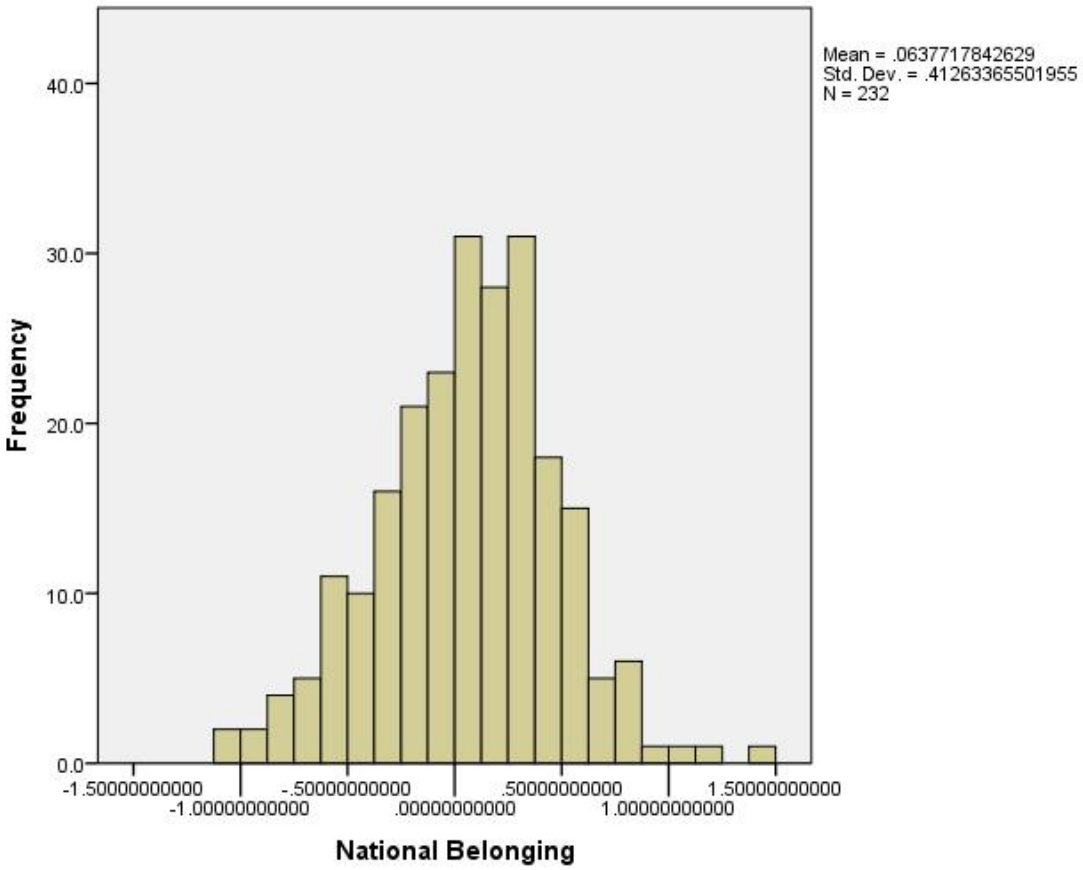
[49] Wikipedia. NUTS statistical regions of Sweden. Version: 29 September 2016. URL: https://en.wikipedia.org/wiki/NUTS_statistical_regions_of_Sweden

[50] Wikipedia. Administrative divisions of France. Version: 14 September 2017. URL: https://en.wikipedia.org/wiki/Administrative_divisions_of_France

Appendix

1 Histograms

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30.0
20.0
10.0
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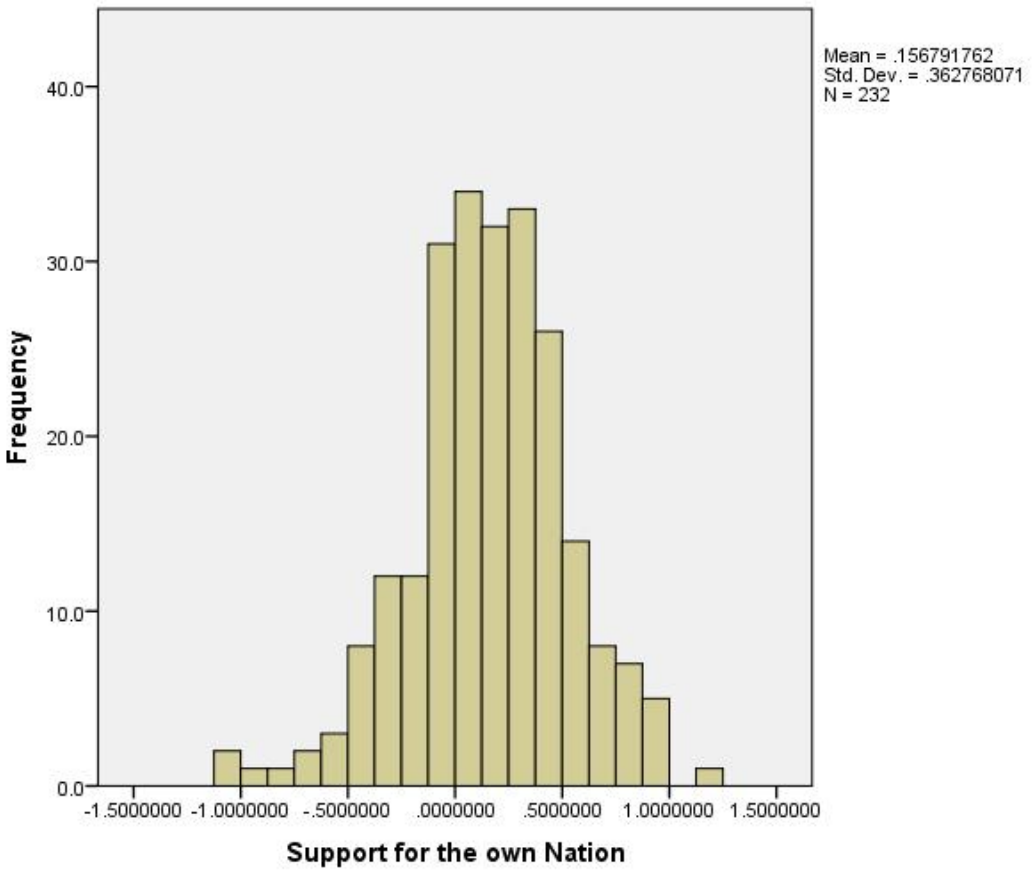
-1.000000000000
-.500000000000
.000000000000
.500000000000
1.000000000000
1.500000000000
National Belonging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Std. Dev. = .362768071
N = 232
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30.0
20.0
10.0
0.0
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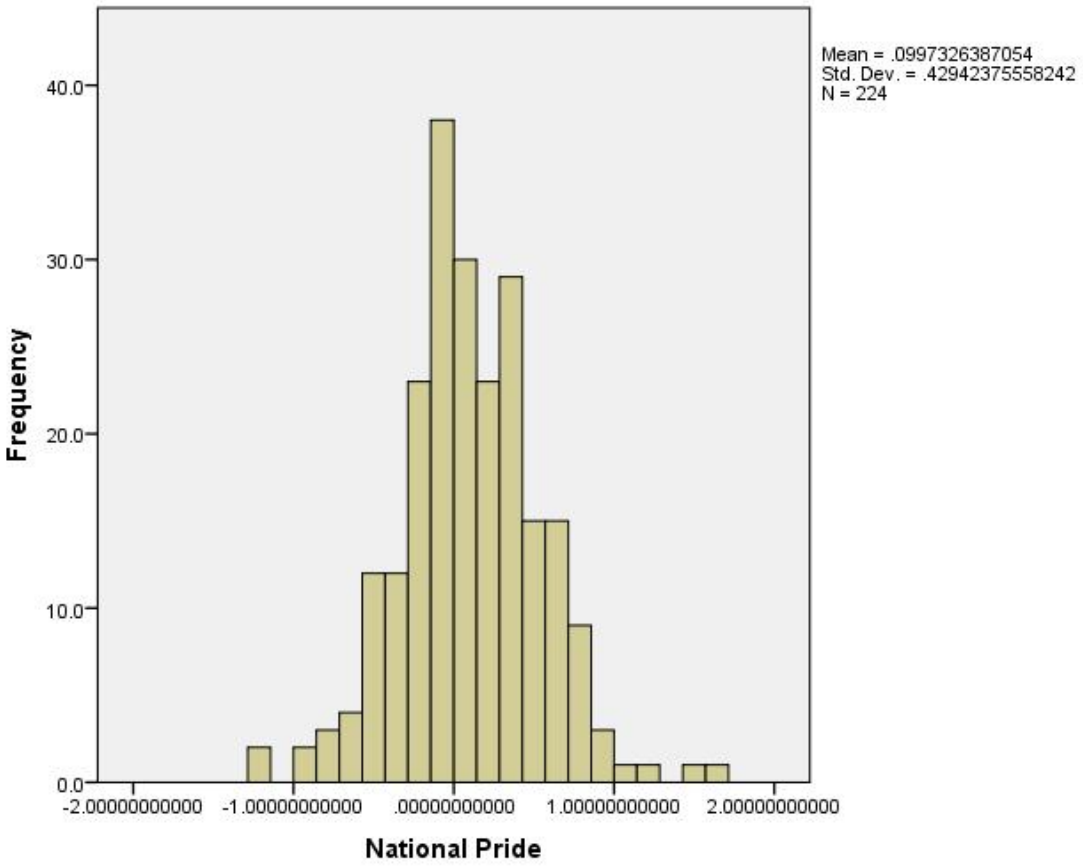
-1.0000000
-.5000000
.0000000
.5000000
1.0000000
1.5000000
Support for the own Nation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N = 224
Frequency
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10.0
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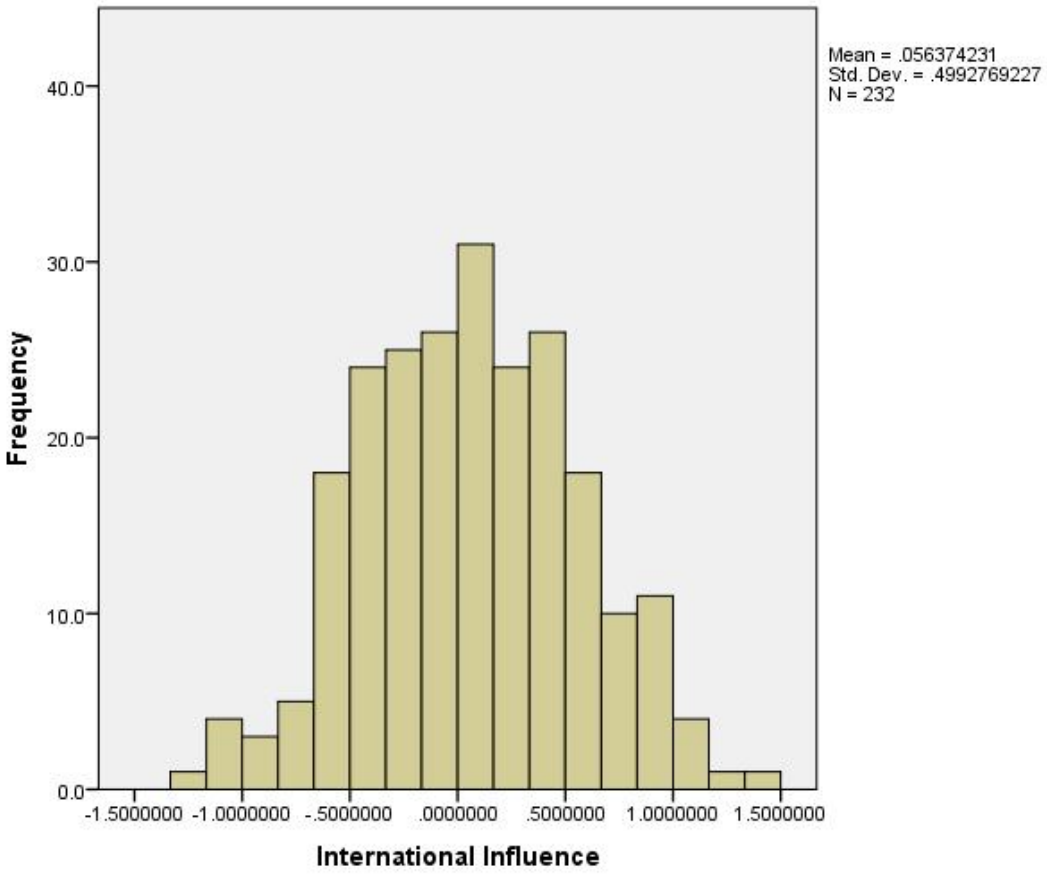
-1.00000000000
.00000000000
1.00000000000
2.00000000000
National Pride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Std. Dev. = .4992769227
N = 232
Frequency
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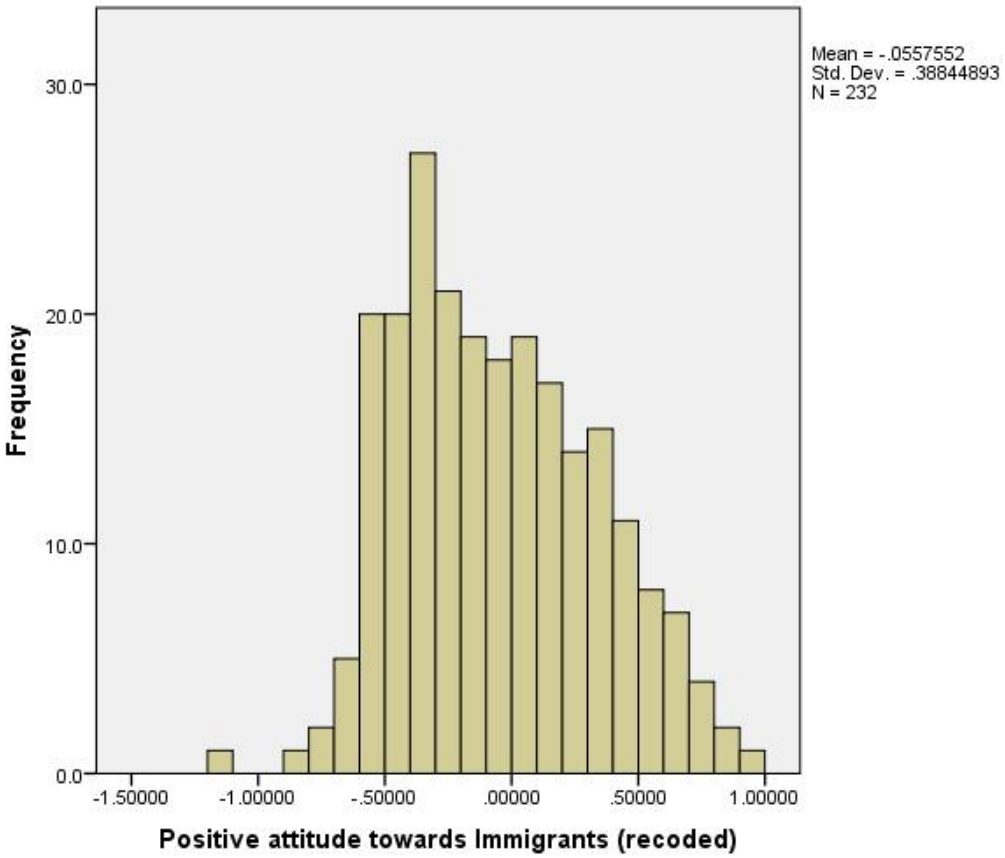
30.0
20.0
10.0
0.0
-1.5000000
-1.0000000
-.5000000
.0000000
.5000000
1.0000000
1.5000000
International Influence


Mean = -.0557552
Std. Dev. = .38844893
N = 232
Frequency
30.0
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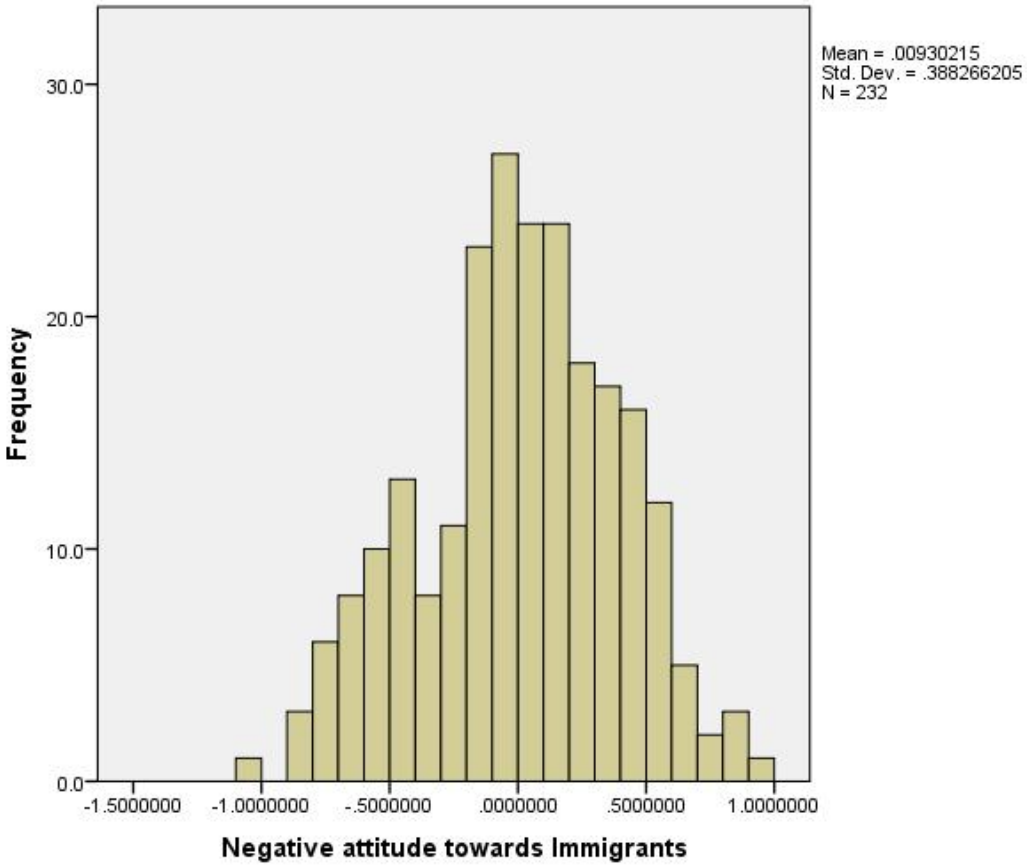
10.0
0.0
-1.50000
-1.00000
-.50000
.00000
.50000
1.00000
Positive attitude towards Immigrants (recoded)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N = 232
Frequency
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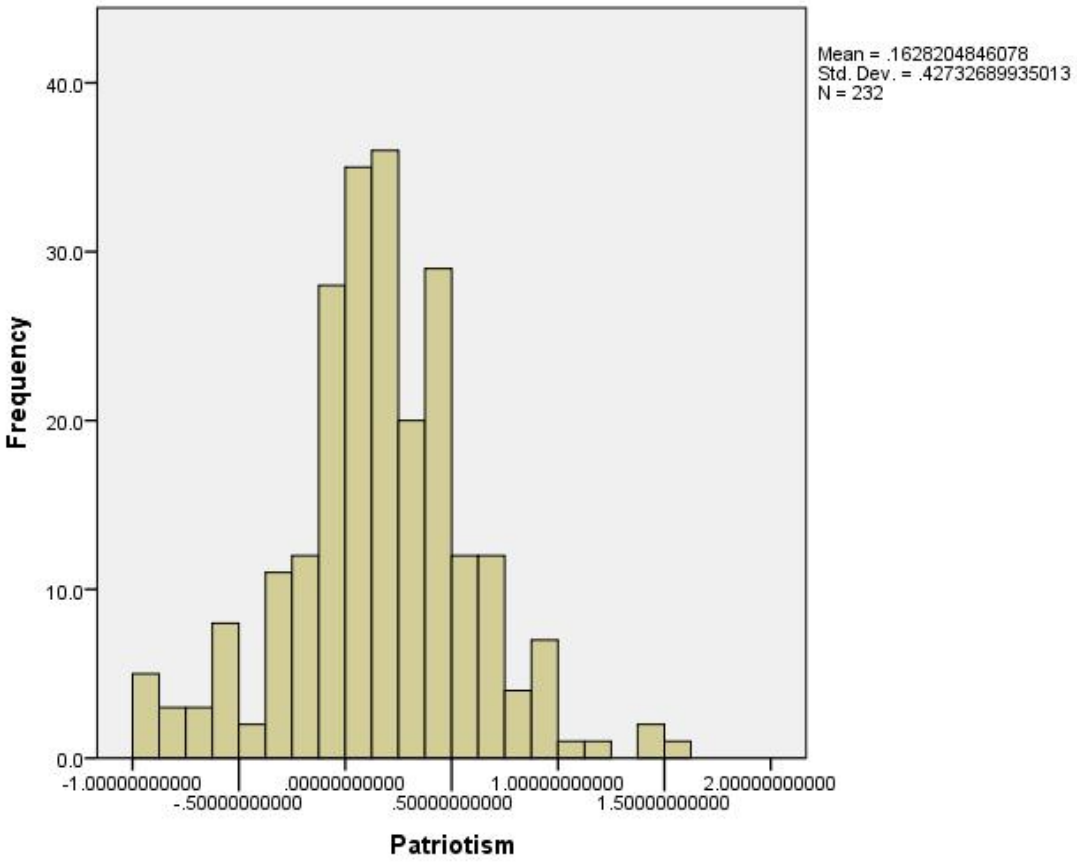
.0000000
.5000000
1.0000000
Negative attitude towards Immigrants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Frequency
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10.0
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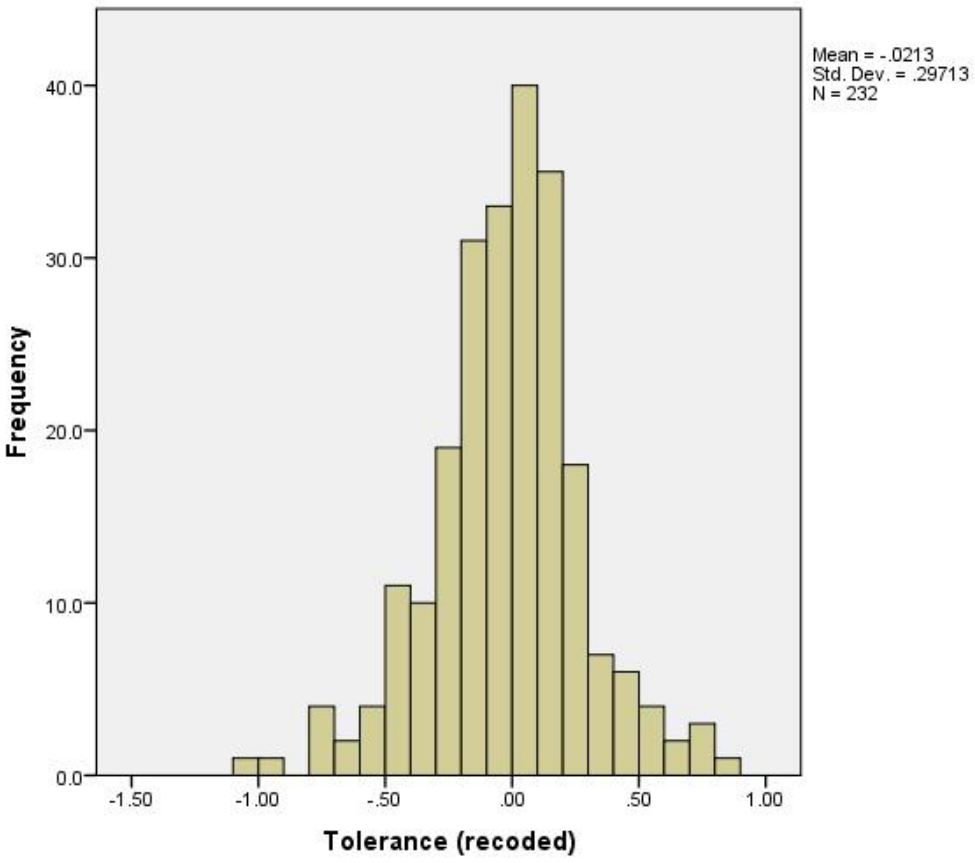
1.50000000000
2.00000000000
Patriotism


Mean = -.0213
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N = 232
Frequency
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30.0
20.0
10.0
0.0
-1.50
-1.00
-.50
.00
.50
1.00
Tolerance (recoded)

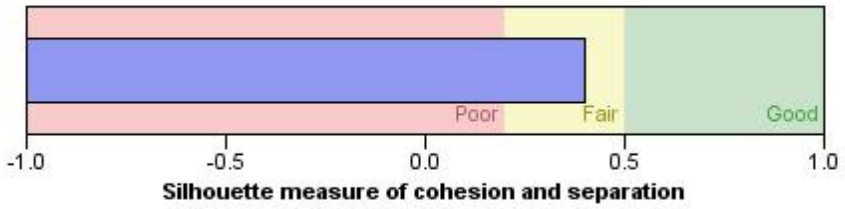
2 TwoStep Cluster

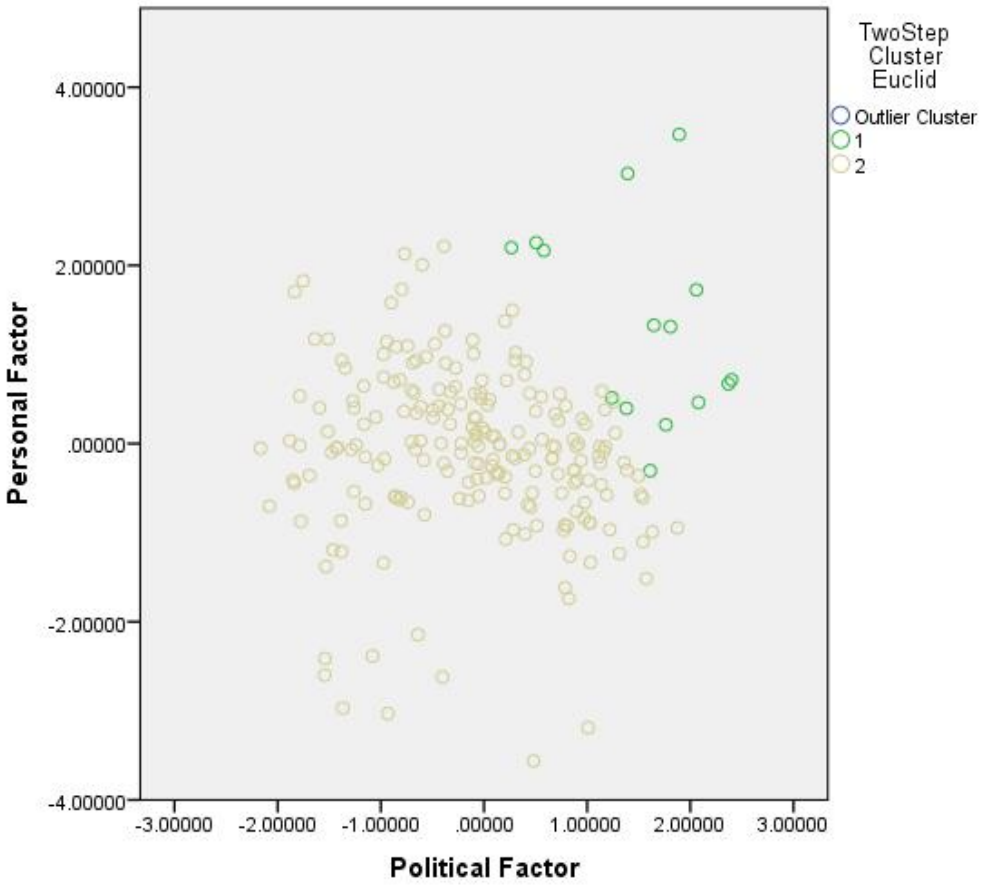
2.1 Euclidian Distance Criterion

Model Summary

Algorithm	TwoStep
Inputs	9
Clusters	2

Cluster Quality



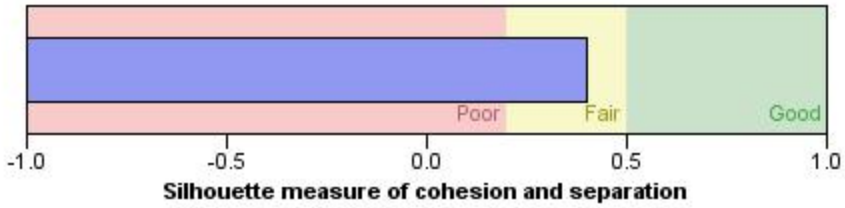


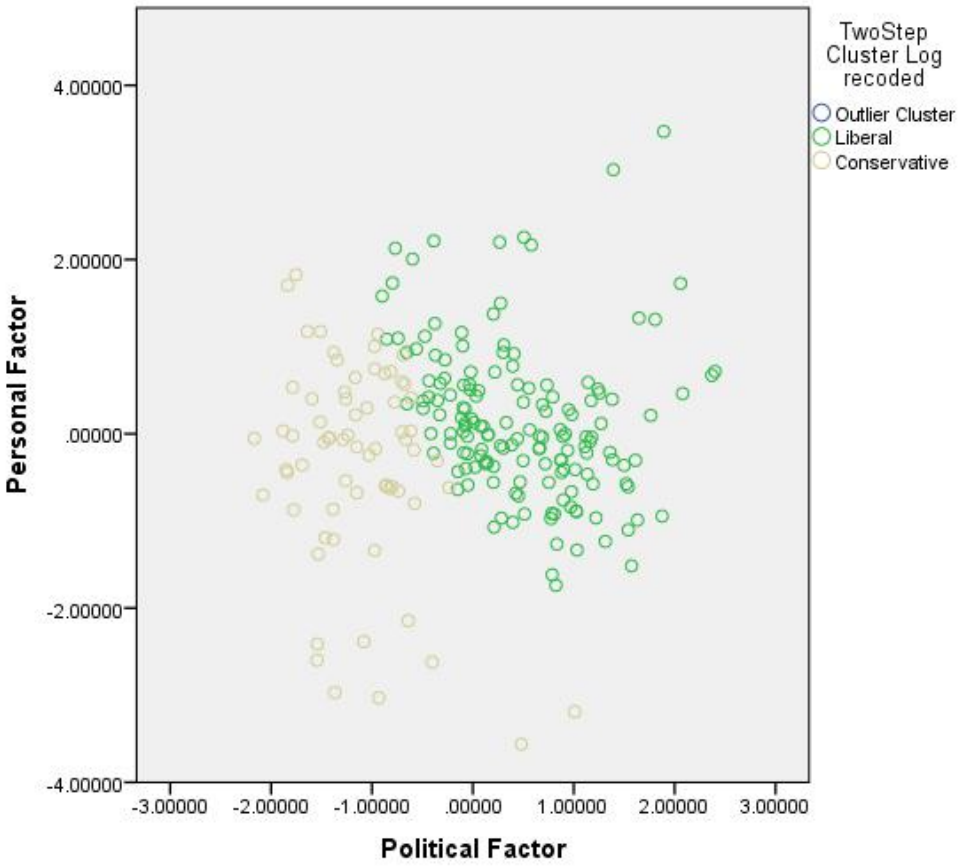
2.2 Log-Likelihood Distance Criterion

Model Summary

Algorithm	TwoStep
Inputs	9
Clusters	2

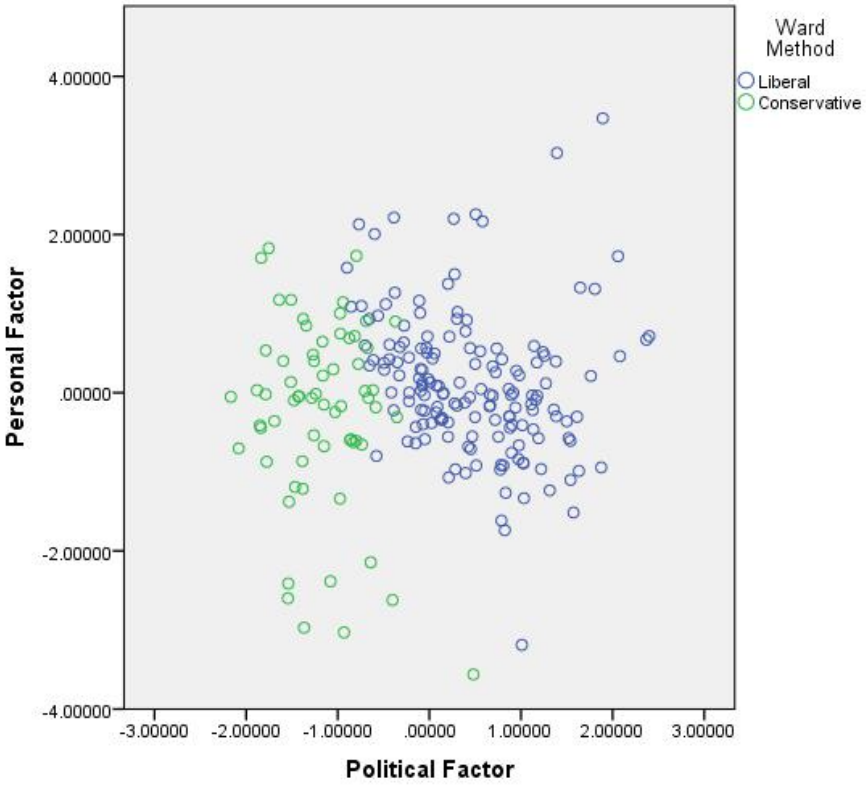
Cluster Quality



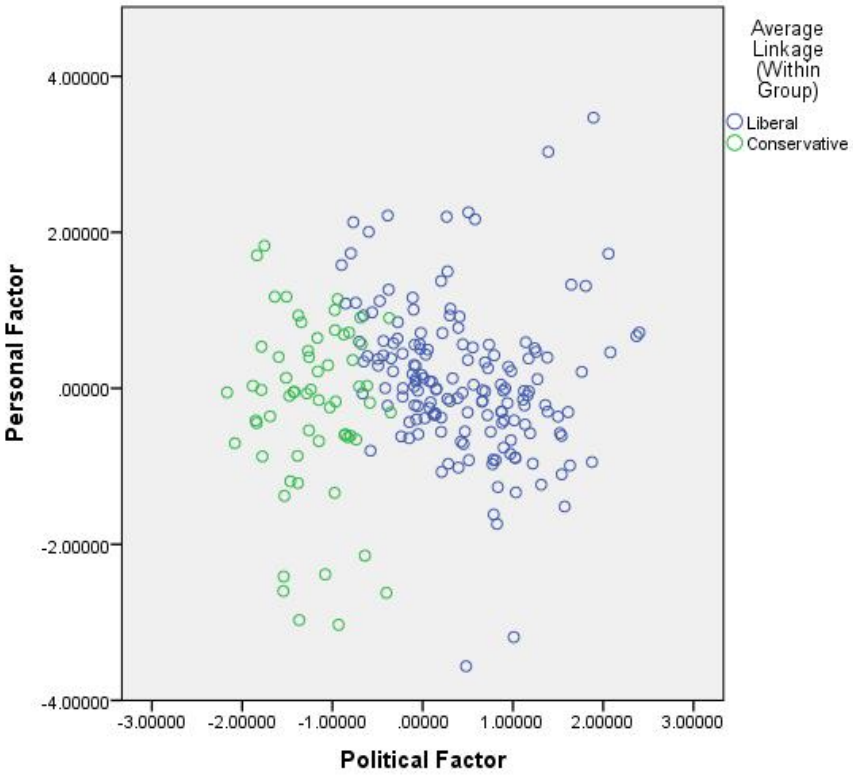


3 Hierarchical Cluster

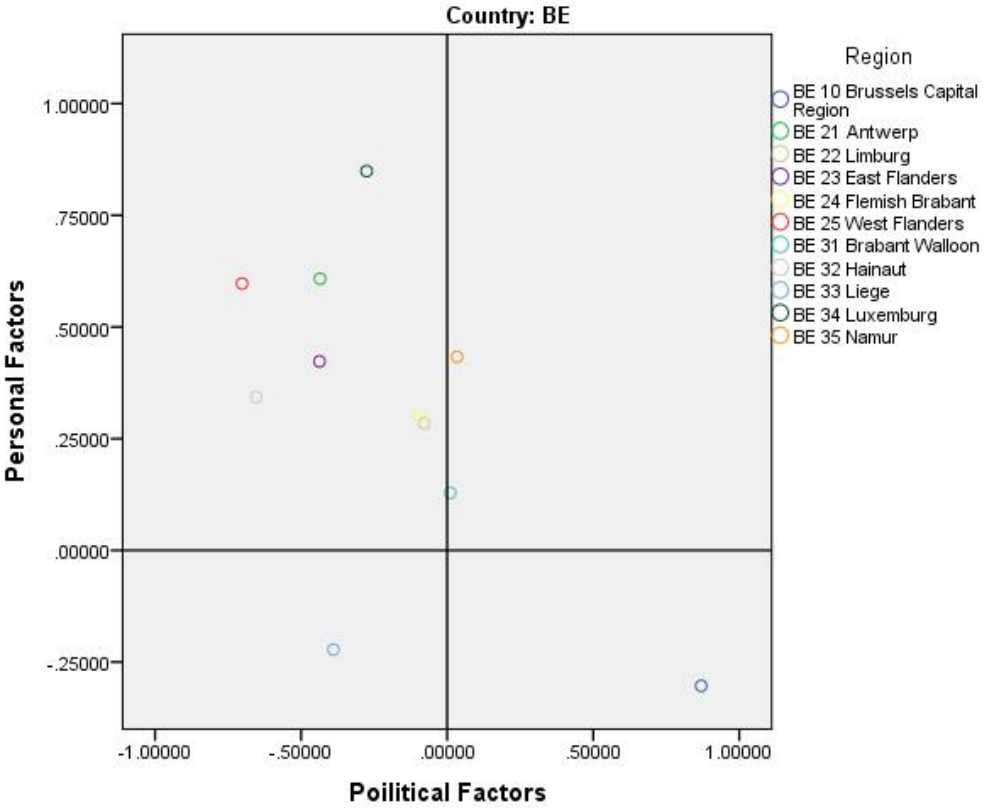
3.1 Ward's Method

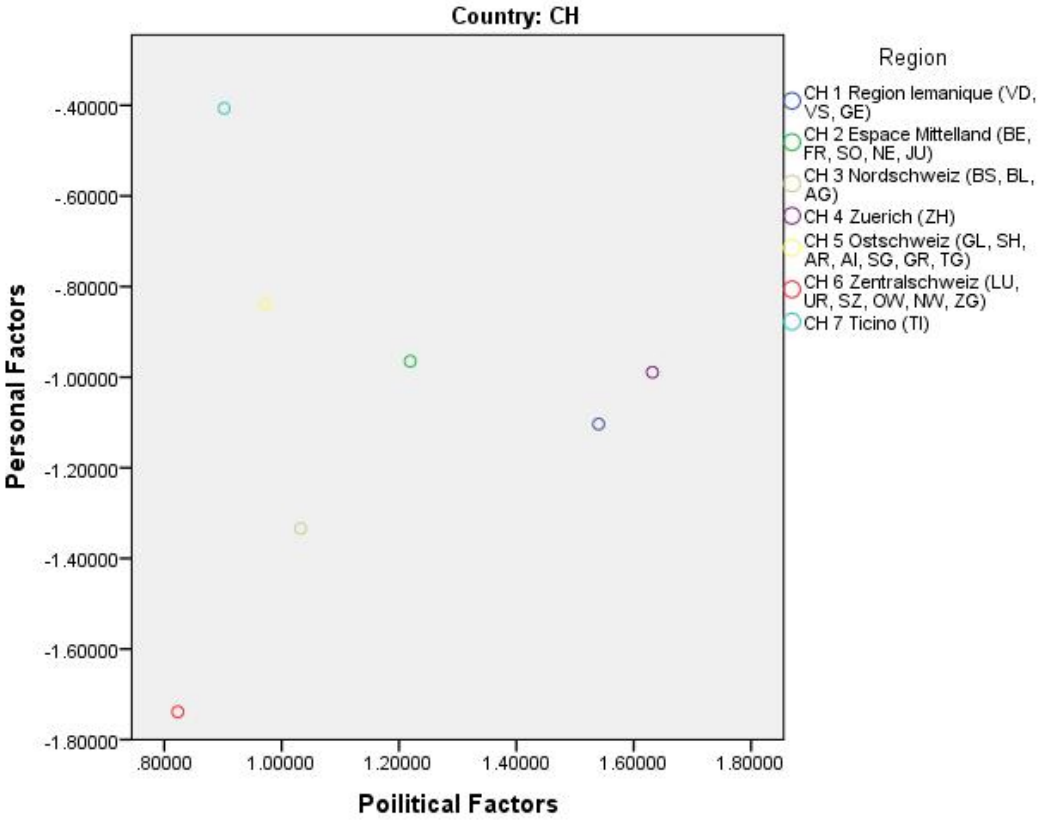


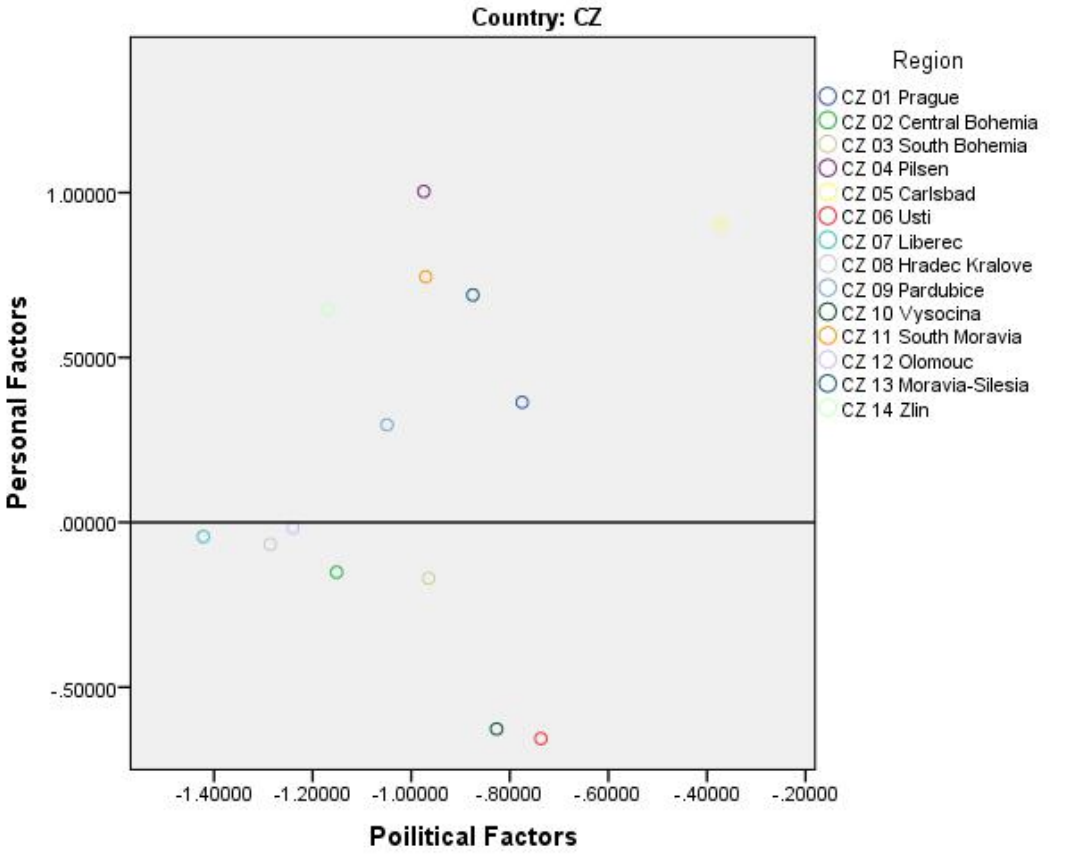
3.2 Average Linkage Method



4 Cluster Solutions



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Region
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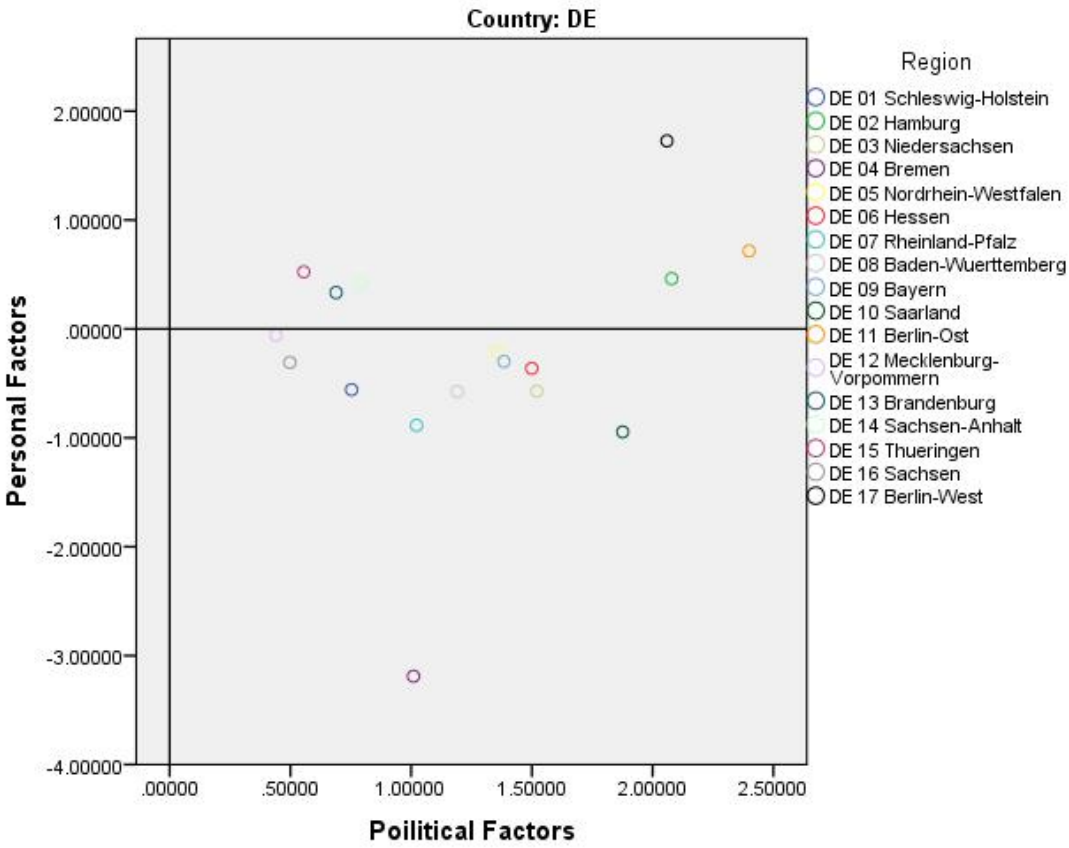
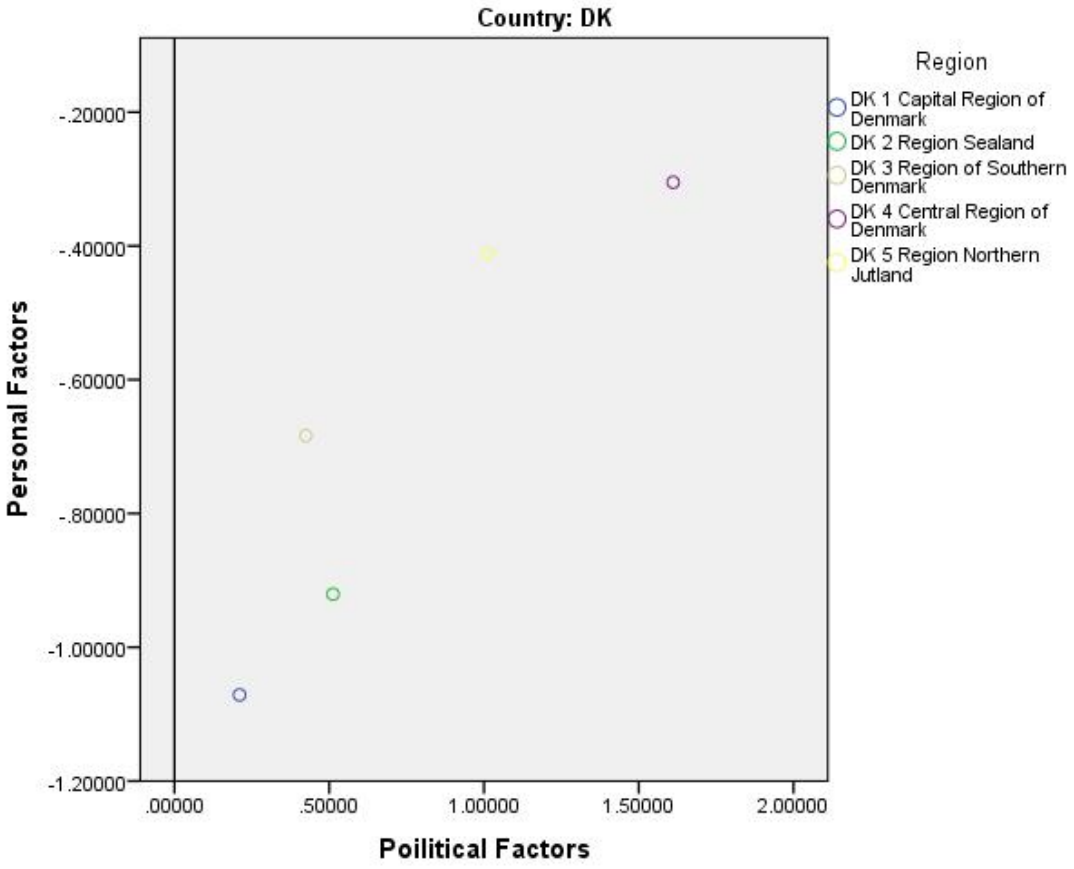
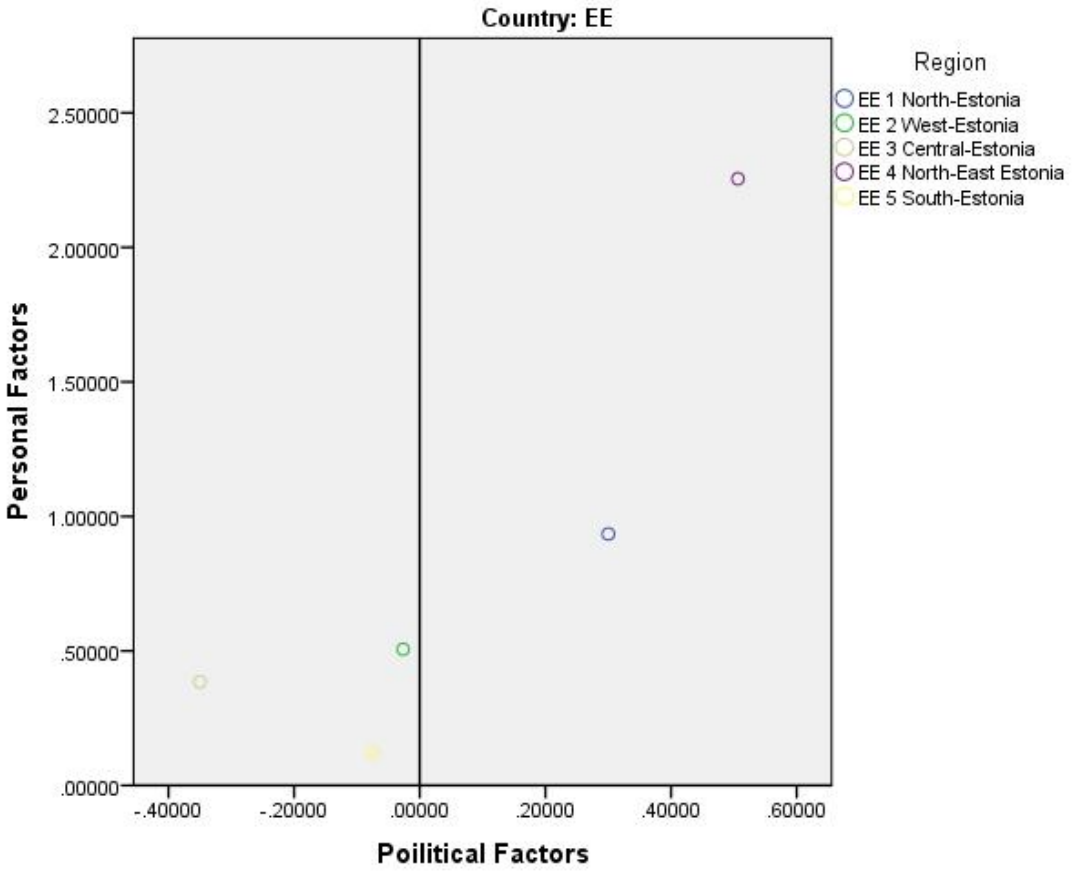
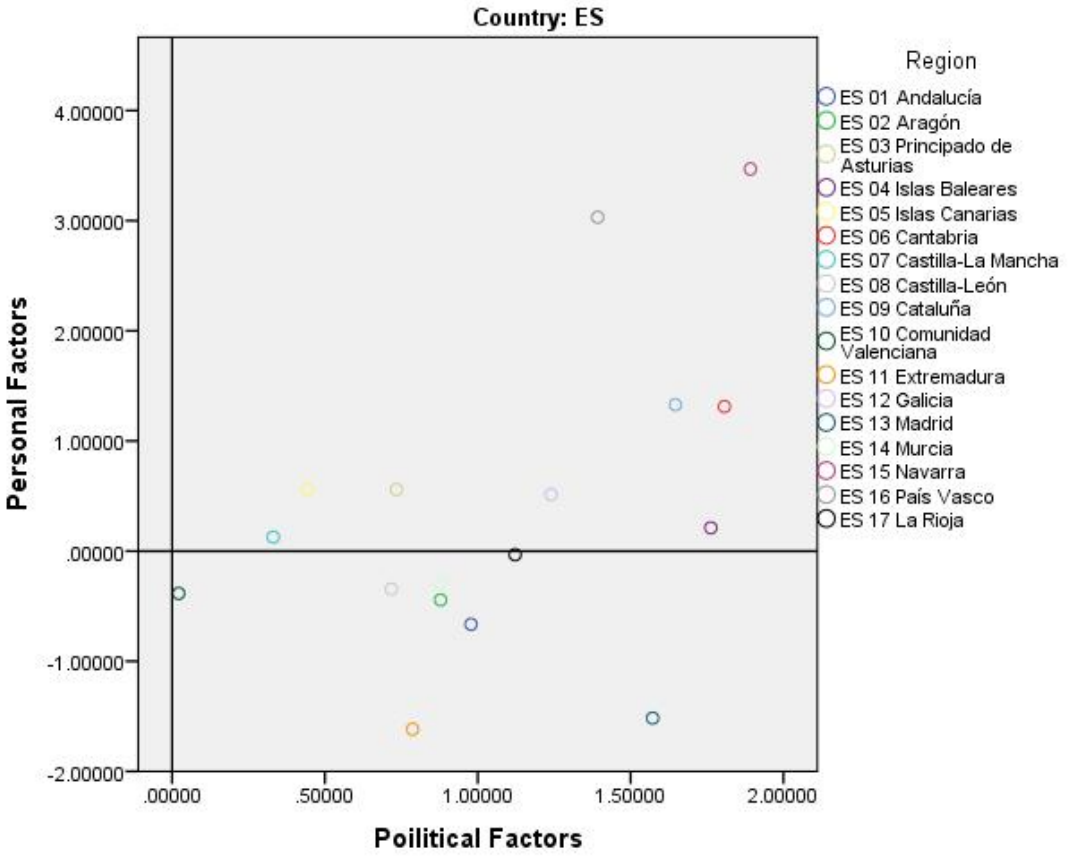
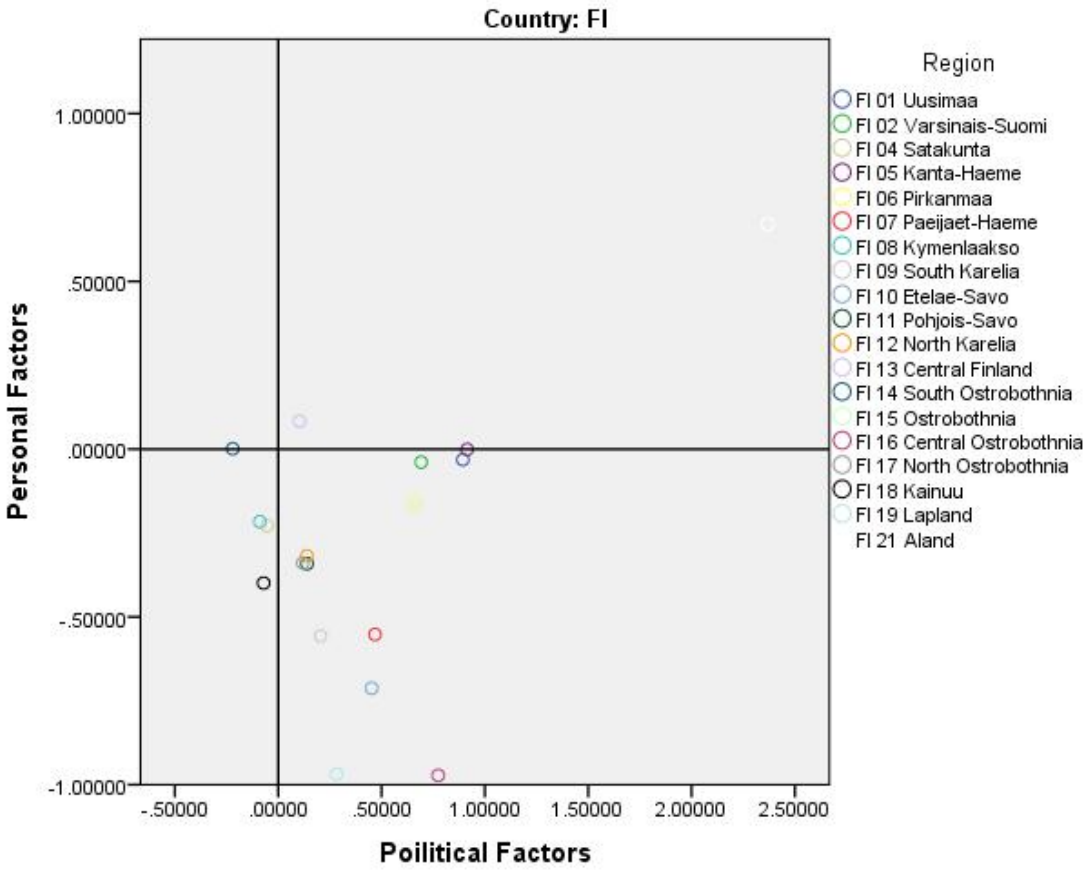
CZ 02 Central Bohemia
CZ 03 South Bohemia
CZ 04 Pilsen
CZ 05 Carlsbad
CZ 06 Usti
CZ 07 Liberec
CZ 08 Hradec Kralove
CZ 09 Pardubice
CZ 10 Vysocina
CZ 11 South Moravia
CZ 12 Olomouc
CZ 13 Moravia-Silesia
CZ 14 Zlin
Personal Factors
1.00000
.50000
.00000
-.50000
-1.40000
-1.20000
-1.00000
-.80000
-.60000
-.40000
-.20000
Poilitical Factors

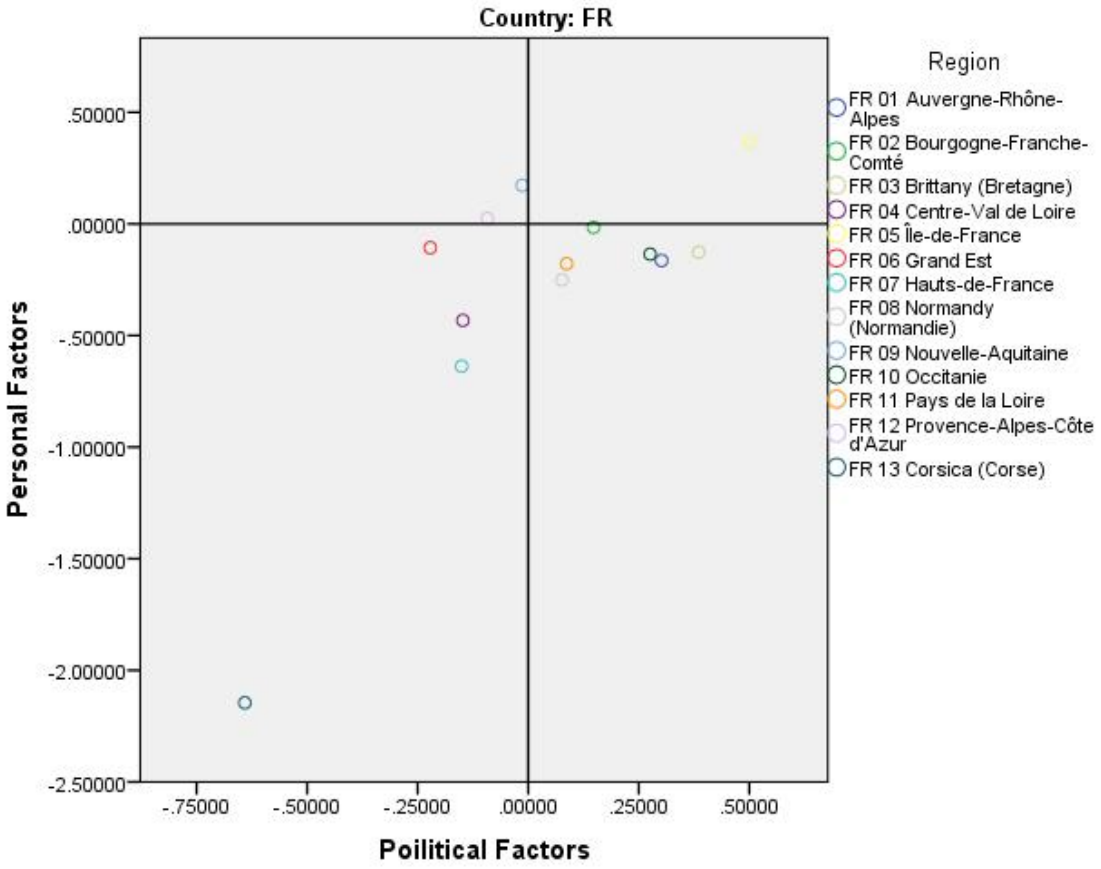

Country: DE
Region
DE 01 Schleswig-Holstein
DE 02 Hamburg
DE 03 Niedersachsen
DE 04 Bremen
DE 05 Nordrhein-Westfalen
DE 06 Hessen
DE 07 Rheinland-Pfalz
DE 08 Baden-Wuerttemberg
DE 09 Bayern
DE 10 Saarland
DE 11 Berlin-Ost
DE 12 Mecklenburg-Vorpommern
DE 13 Brandenburg
DE 14 Sachsen-Anhalt
DE 15 Thueringen
DE 16 Sachsen
DE 17 Berlin-West
Personal Factors
2.00000
1.00000
.00000
-1.00000
-2.00000
-3.00000
-4.00000
.00000
.50000
1.00000
1.50000
2.00000
2.50000
Poilitical Factors

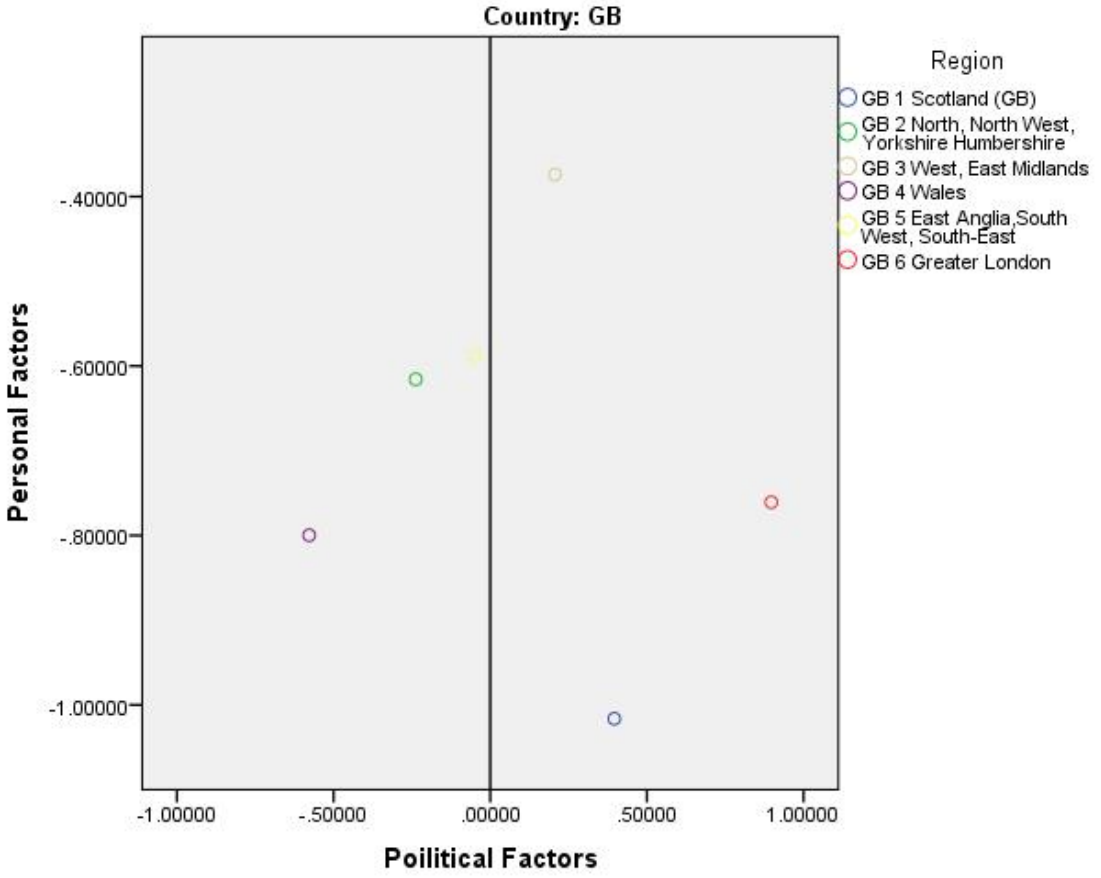

Country: DK
Region
DK 1 Capital Region of Denmark
DK 2 Region Sealand
DK 3 Region of Southern Denmark
DK 4 Central Region of Denmark
DK 5 Region Northern Jutland
Personal Factors
-.20000
-.40000
-.60000
-.80000
-1.00000
-1.20000
.00000
.50000
1.00000
1.50000
2.00000
Poilitical Factors

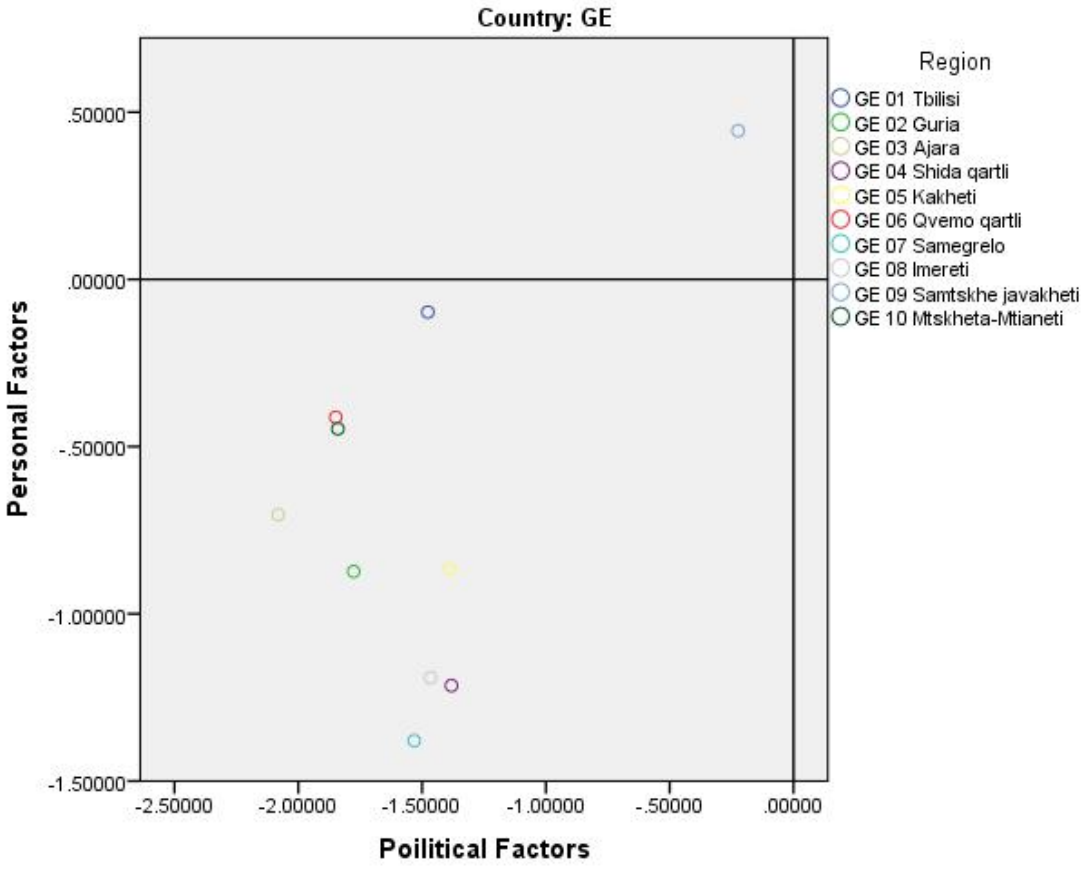

Country: EE
Region
EE 1 North-Estonia
EE 2 West-Estonia
EE 3 Central-Estonia
EE 4 North-East Estonia
EE 5 South-Estonia
Personal Factors
2.50000
2.00000
1.50000
1.00000
.50000
.00000
-.40000
-.20000
.00000
.20000
.40000
.60000
Poilitical Factors

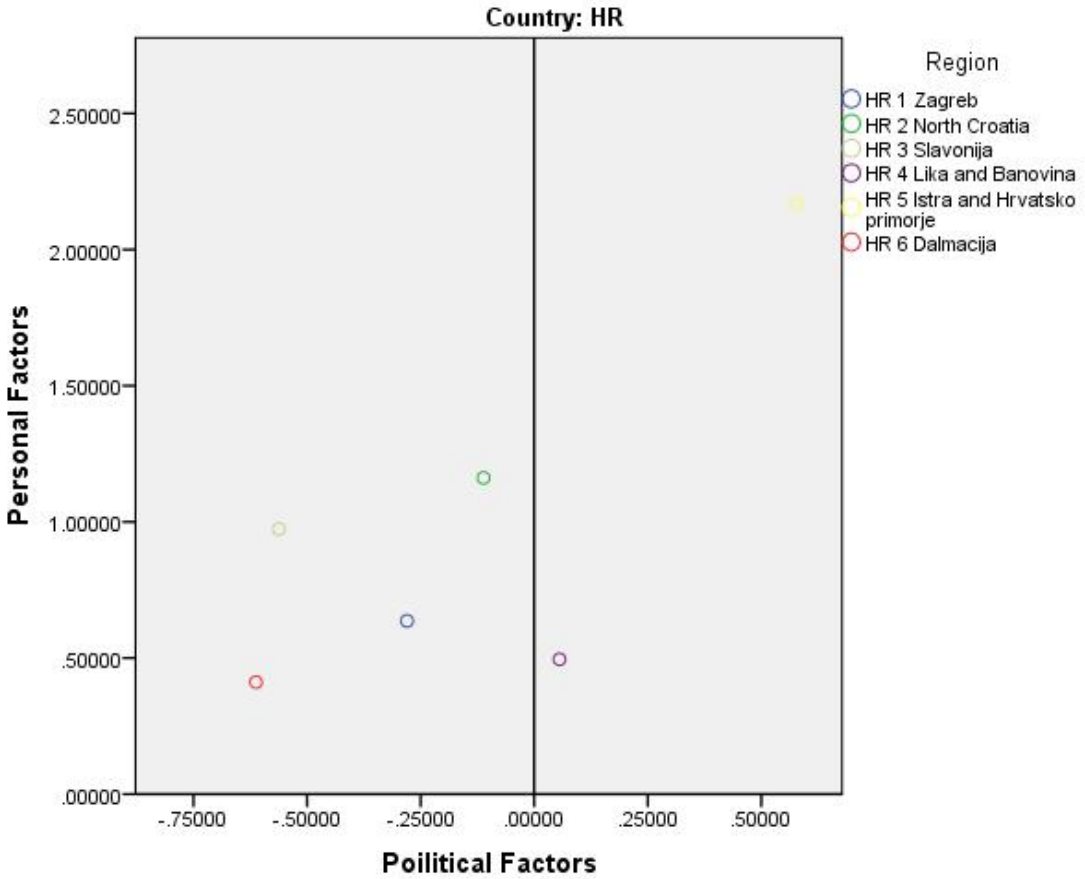

Country: ES
Region
ES 01 Andalucía
ES 02 Aragón
ES 03 Principado de Asturias
ES 04 Islas Baleares
ES 05 Islas Canarias
ES 06 Cantabria
ES 07 Castilla-La Mancha
ES 08 Castilla-León
ES 09 Cataluña
ES 10 Comunidad Valenciana
ES 11 Extremadura
ES 12 Galicia
ES 13 Madrid
ES 14 Murcia
ES 15 Navarra
ES 16 País Vasco
ES 17 La Rioja
Personal Factors
4.00000
3.00000
2.00000
1.00000
.00000
-1.00000
-2.00000
.00000
.50000
1.00000
1.50000
2.00000
Poilitical Factors

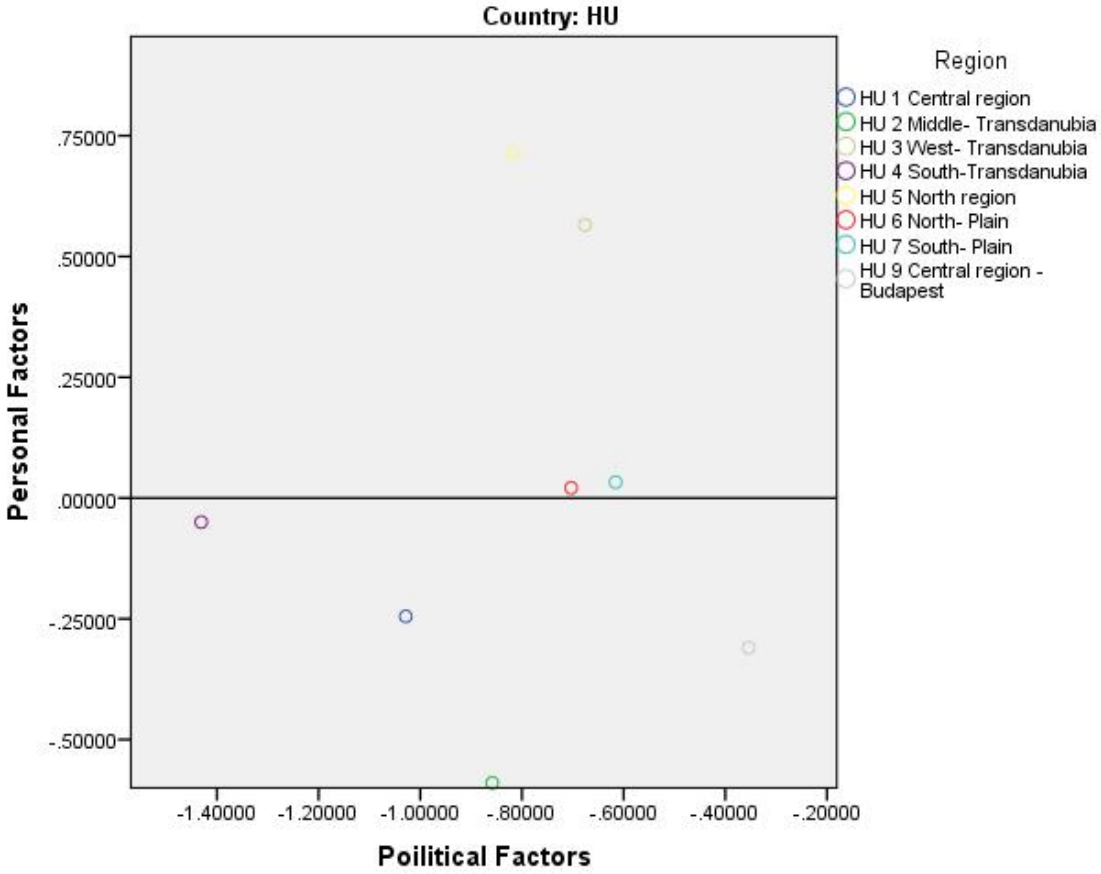

Country: FI
Region
FI 01 Uusimaa
FI 02 Varsinais-Suomi
FI 04 Satakunta
FI 05 Kanta-Haeme
FI 06 Pirkanmaa
FI 07 Paeijaet-Haeme
FI 08 Kymenlaakso
FI 09 South Karelia
FI 10 Etelae-Savo
FI 11 Pohjois-Savo
FI 12 North Karelia
FI 13 Central Finland
FI 14 South Ostrobothnia
FI 15 Ostrobothnia
FI 16 Central Ostrobothnia
FI 17 North Ostrobothnia
FI 18 Kainuu
FI 19 Lapland
FI 21 Aland
Personal Factors
1.00000
.50000
.00000
-.50000
-1.00000
-.50000
.00000
.50000
1.00000
1.50000
2.00000
2.50000
Poilitical Factors

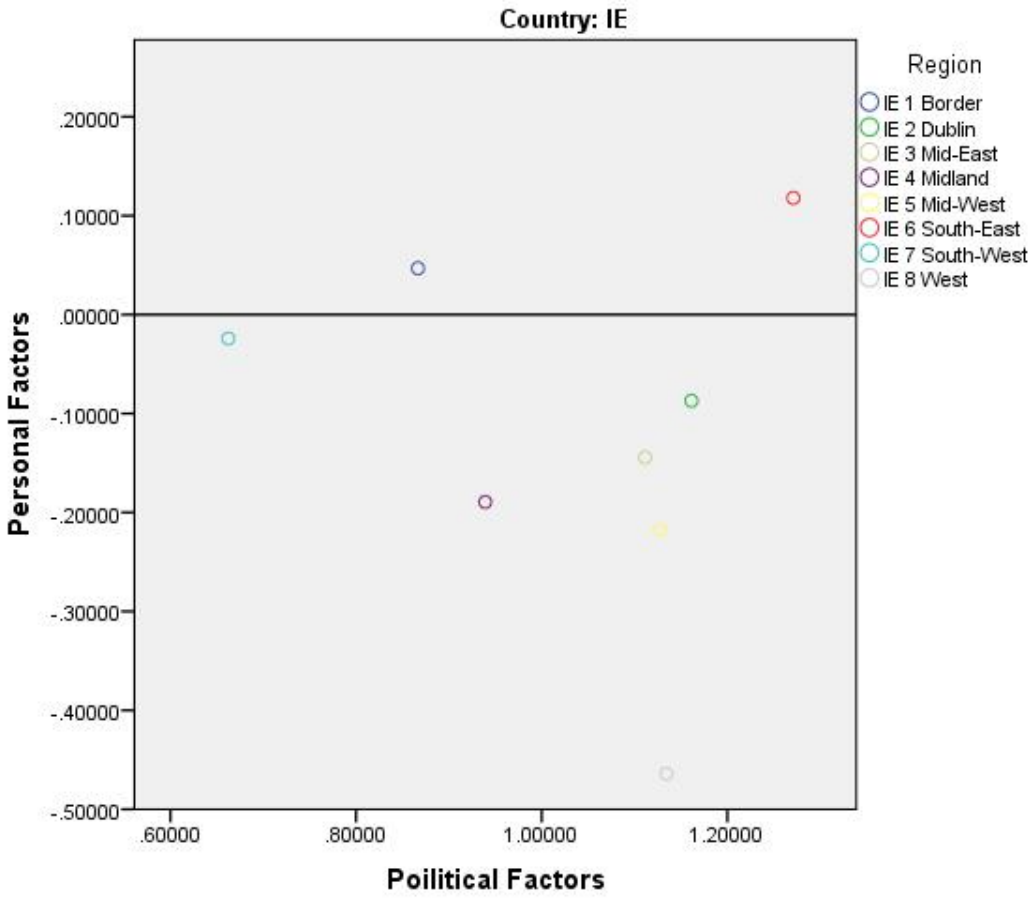

Country: FR
Region
FR 01 Auvergne-Rhône-Alpes
FR 02 Bourgogne-Franche-Comté
FR 03 Brittany (Bretagne)
FR 04 Centre-Val de Loire
FR 05 Île-de-France
FR 06 Grand Est
FR 07 Hauts-de-France
FR 08 Normandy (Normandie)
FR 09 Nouvelle-Aquitaine
FR 10 Occitanie
FR 11 Pays de la Loire
FR 12 Provence-Alpes-Côte d'Azur
FR 13 Corsica (Corse)
Personal Factors
.50000
.00000
-.50000
-1.00000
-1.50000
-2.00000
-2.50000
-.75000
-.50000
-.25000
.00000
.25000
.50000
Poilitical Factors

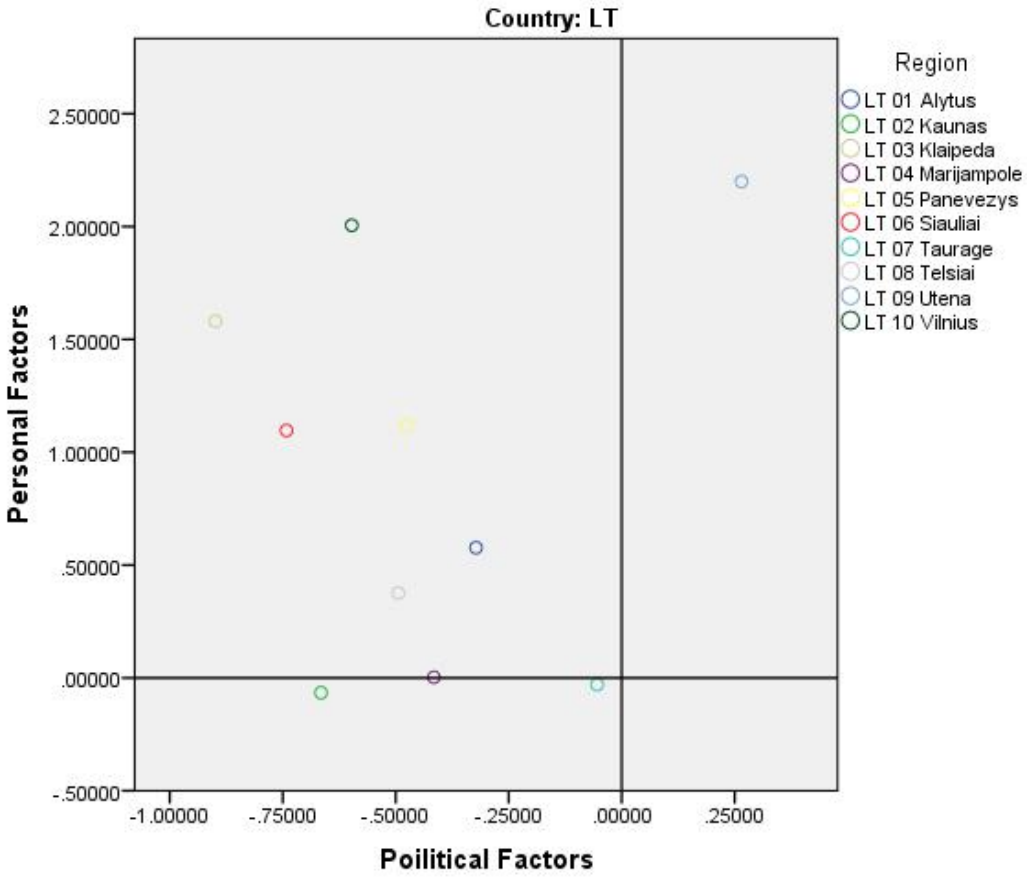

Country: GB
Region
GB 1 Scotland (GB)
GB 2 North, North West, Yorkshire Humbershire
GB 3 West, East Midlands
GB 4 Wales
GB 5 East Anglia,South West, South-East
GB 6 Greater London
Personal Factors
-.40000
-.60000
-.80000
-1.00000
-1.00000
-.50000
.00000
.50000
1.00000
Poilitical Factors

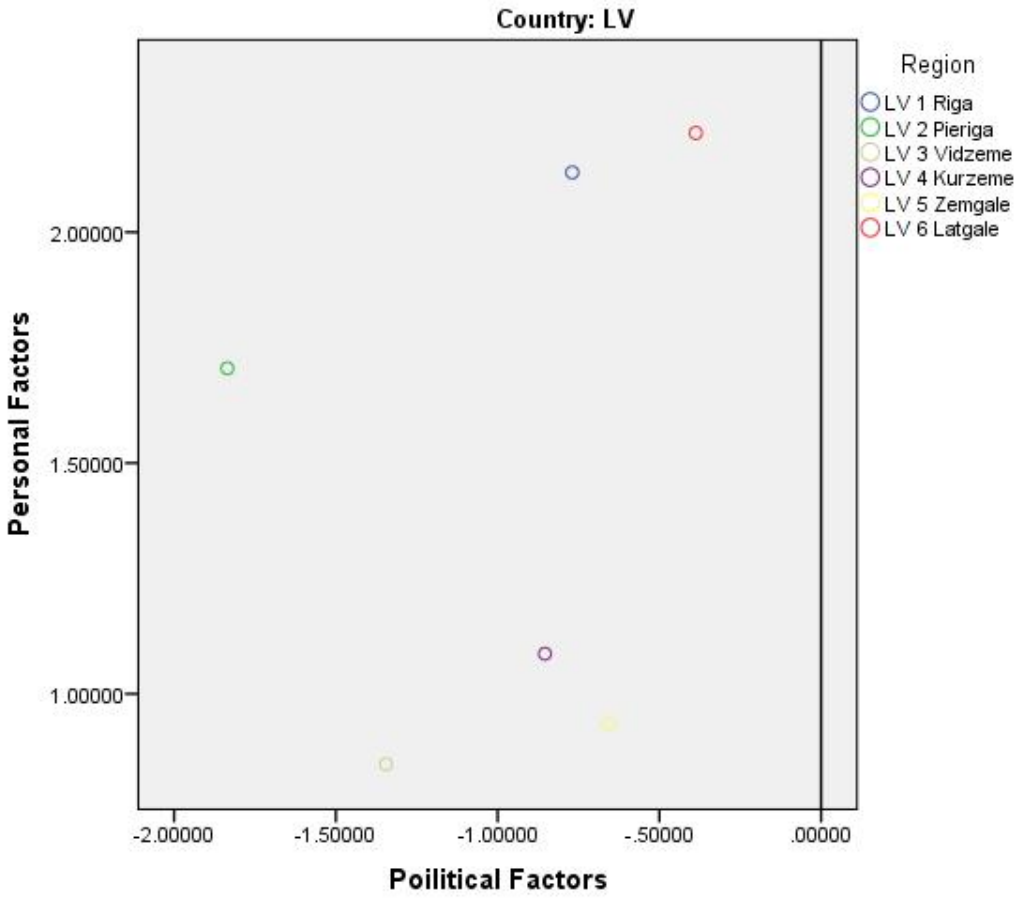

Country: GE
Region
GE 01 Tbilisi
GE 02 Guria
GE 03 Ajara
GE 04 Shida qartli
GE 05 Kakheti
GE 06 Qvemo qartli
GE 07 Samegrelo
GE 08 Imereti
GE 09 Samtskhe javakheti
GE 10 Mtskheta-Mtianeti
Personal Factors
.50000
.00000
-.50000
-1.00000
-1.50000
-2.50000
-2.00000
-1.50000
-1.00000
-.50000
.00000
Poilitical Factors

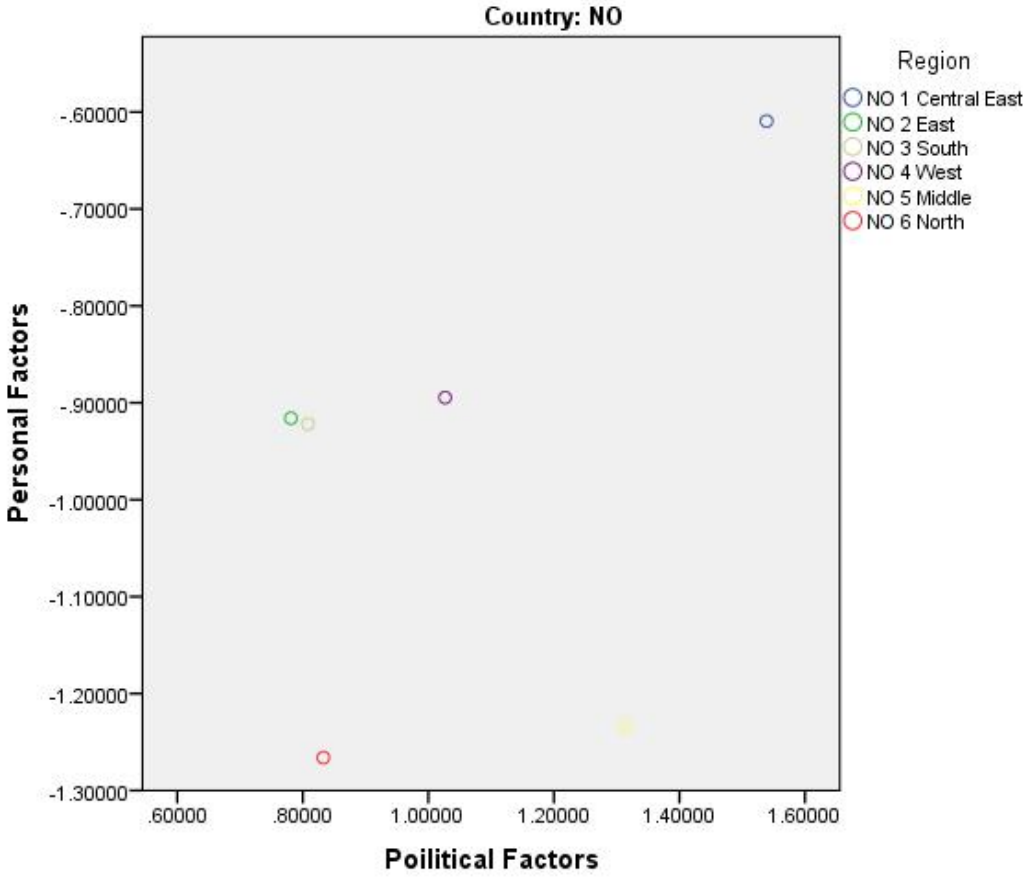

Country: HR
Region
HR 1 Zagreb
HR 2 North Croatia
HR 3 Slavonija
HR 4 Lika and Banovina
HR 5 Istra and Hrvatsko primorje
HR 6 Dalmacija
Personal Factors
2.50000
2.00000
1.50000
1.00000
.50000
.00000
-.75000
-.50000
-.25000
.00000
.25000
.50000
Poilitical Factors

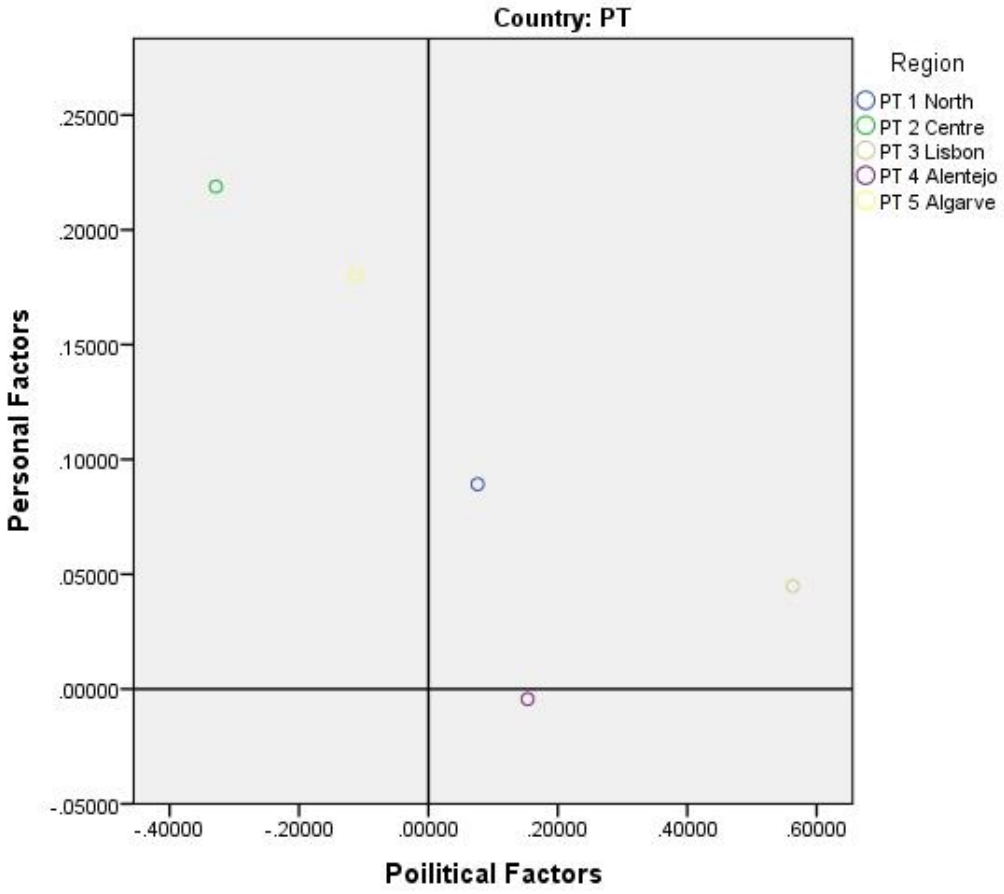

Country: HU
Region
HU 1 Central region
HU 2 Middle- Transdanubia
HU 3 West- Transdanubia
HU 4 South-Transdanubia
HU 5 North region
HU 6 North- Plain
HU 7 South- Plain
HU 9 Central region - Budapest
Personal Factors
.75000
.50000
.25000
.00000
-.25000
-.50000
-1.40000
-1.20000
-1.00000
-.80000
-.60000
-.40000
-.20000
Poilitical Factors

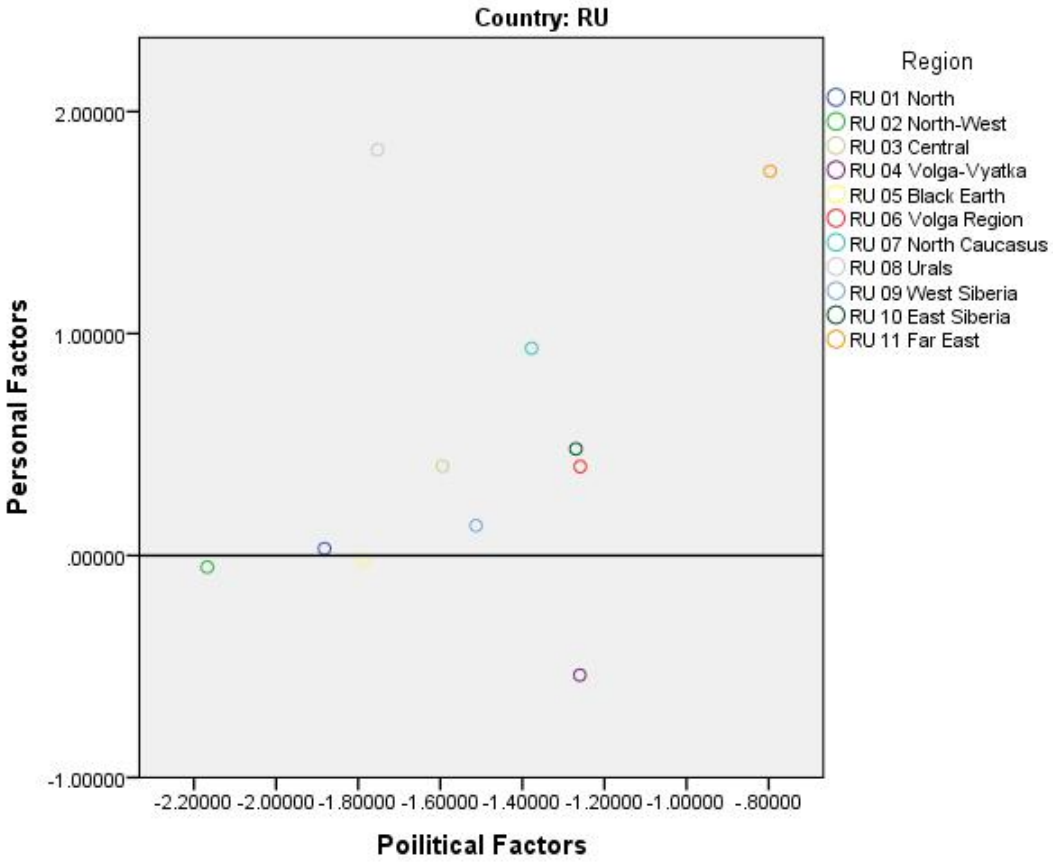

Country: IE
Region
IE 1 Border
IE 2 Dublin
IE 3 Mid-East
IE 4 Midland
IE 5 Mid-West
IE 6 South-East
IE 7 South-West
IE 8 West
Personal Factors
.20000
.10000
.00000
-.10000
-.20000
-.30000
-.40000
-.50000
.60000
.80000
1.00000
1.20000
Poilitical Factors


Country: LT
Region
LT 01 Alytus
LT 02 Kaunas
LT 03 Klaipeda
LT 04 Marijampole
LT 05 Panevezys
LT 06 Siauliai
LT 07 Taurage
LT 08 Telsiai
LT 09 Utena
LT 10 Vilnius
Personal Factors
2.50000
2.00000
1.50000
1.00000
.50000
.00000
-.50000
-1.00000
-.75000
-.50000
-.25000
.00000
.25000
Poilitical Factors


Country: LV
Region
LV 1 Riga
LV 2 Pieriga
LV 3 Vidzeme
LV 4 Kurzeme
LV 5 Zemgale
LV 6 Latgale
Personal Factors
2.00000
1.50000
1.00000
-2.00000
-1.50000
-1.00000
-.50000
.00000
Poilitical Factors


Country: NO
Region
NO 1 Central East
NO 2 East
NO 3 South
NO 4 West
NO 5 Middle
NO 6 North
Personal Factors
-.60000
-.70000
-.80000
-.90000
-1.00000
-1.10000
-1.20000
-1.30000
.60000
.80000
1.00000
1.20000
1.40000
1.60000
Poilitical Factors


Country: PT
Region
PT 1 North
PT 2 Centre
PT 3 Lisbon
PT 4 Alentejo
PT 5 Algarve
Personal Factors
.25000
.20000
.15000
.10000
.05000
.00000
-.05000
-.40000
-.20000
.00000
.20000
.40000
.60000
Poilitical Factors


Country: RU
Region
RU 01 North
RU 02 North-West
RU 03 Central
RU 04 Volga-Vyatka
RU 05 Black Earth
RU 06 Volga Region
RU 07 North Caucasus
RU 08 Urals
RU 09 West Siberia
RU 10 East Siberia
RU 11 Far East
Personal Factors
2.00000
1.00000
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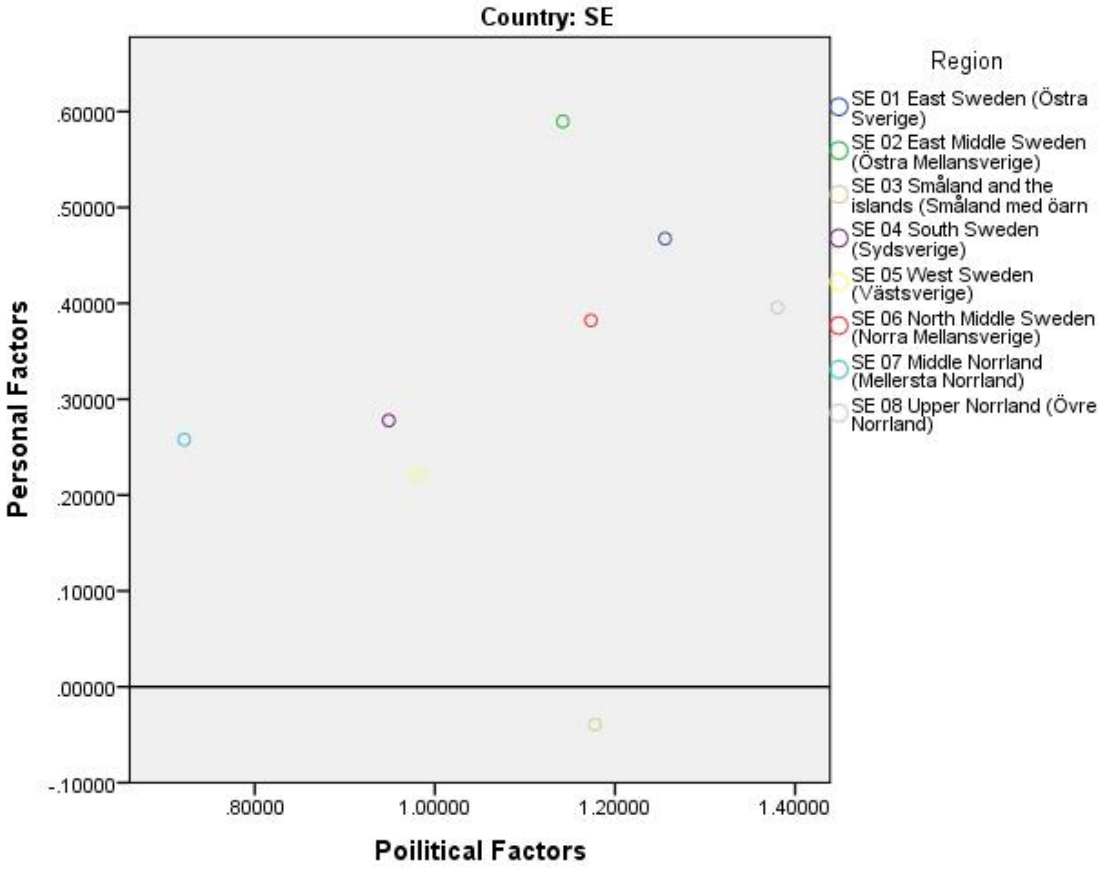
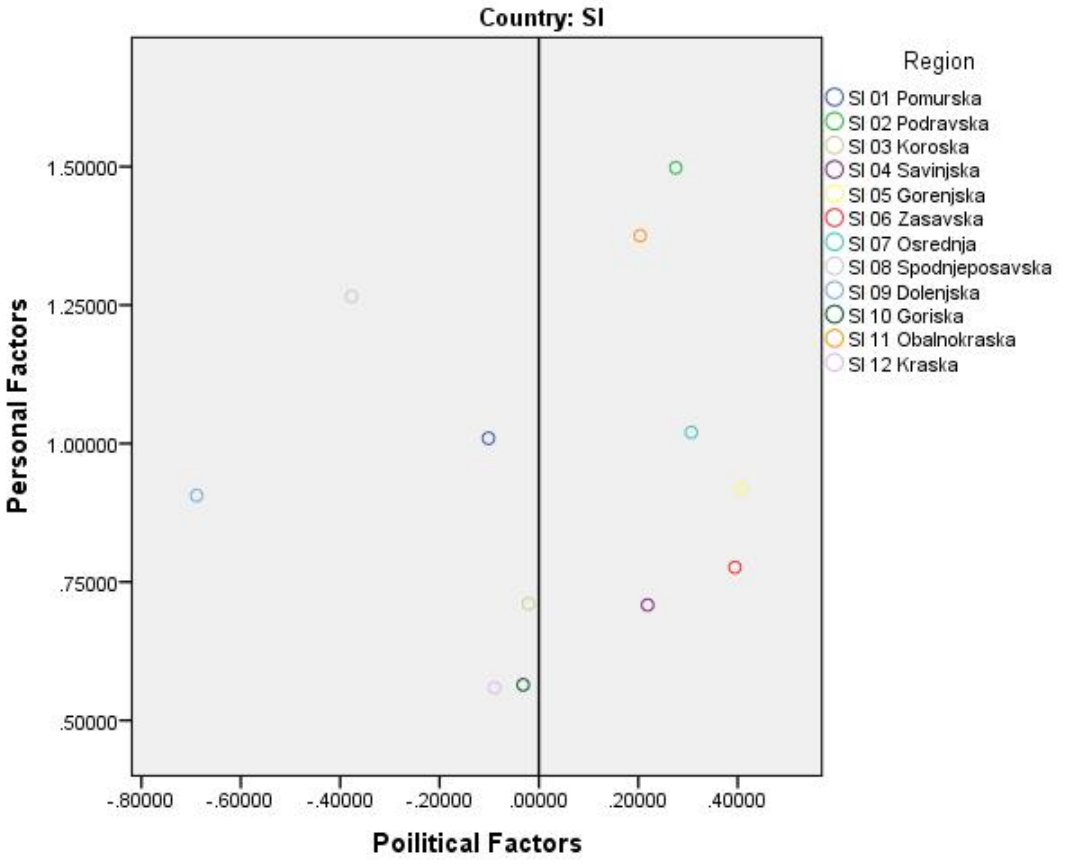
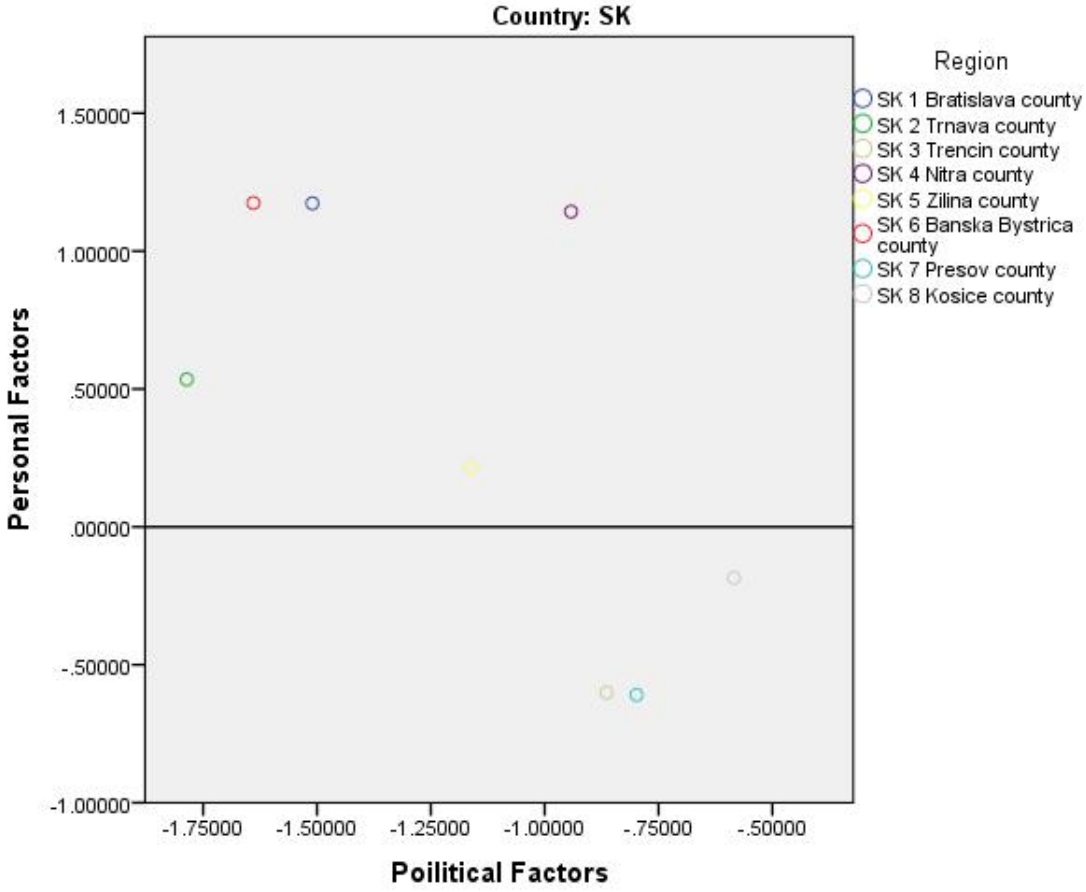
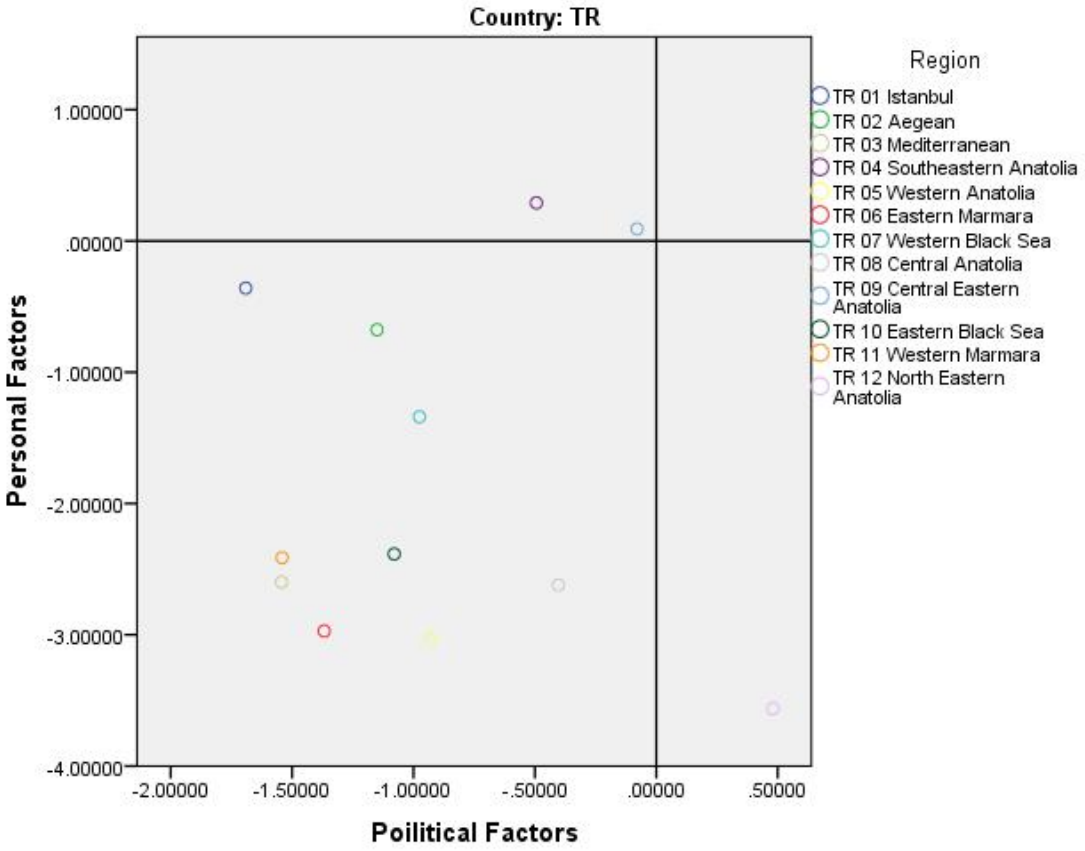
-1.00000
-2.20000 -2.00000 -1.80000 -1.60000 -1.40000 -1.20000 -1.00000 -.80000
Poilitical Factors


Country: SE
Region
SE 01 East Sweden (Östra Sverige)
SE 02 East Middle Sweden (Östra Mellansverige)
SE 03 Småland and the islands (Småland med öarn
SE 04 South Sweden (Sydsverige)
SE 05 West Sweden (Västsverige)
SE 06 North Middle Sweden (Norra Mellansverige)
SE 07 Middle Norrland (Mellersta Norrland)
SE 08 Upper Norrland (Övre Norrland)
Personal Factors
.60000
.50000
.40000
.30000
.20000
.10000
.00000
-.10000
.80000
1.00000
1.20000
1.40000
Poilitical Factors


Country: SI
Region
SI 01 Pomurska
SI 02 Podravska
SI 03 Koroska
SI 04 Savinjska
SI 05 Gorenjska
SI 06 Zasavska
SI 07 Osrednja
SI 08 Spodnjeposavska
SI 09 Dolenjska
SI 10 Goriska
SI 11 Obalnokraska
SI 12 Kraska
Personal Factors
1.50000
1.25000
1.00000
.75000
.50000
-.80000
-.60000
-.40000
-.20000
.00000
.20000
.40000
Poilitical Factors


Country: SK
Region
SK 1 Bratislava county
SK 2 Trnava county
SK 3 Trencin county
SK 4 Nitra county
SK 5 Zilina county
SK 6 Banska Bystrica county
SK 7 Presov county
SK 8 Kosice county
Personal Factors
1.50000
1.00000
.50000
.00000
-.50000
-1.00000
-1.75000
-1.50000
-1.25000
-1.00000
-.75000
-.50000
Poilitical Factors


Country: TR
Region
TR 01 Istanbul
TR 02 Aegean
TR 03 Mediterranean
TR 04 Southeastern Anatolia
TR 05 Western Anatolia
TR 06 Eastern Marmara
TR 07 Western Black Sea
TR 08 Central Anatolia
TR 09 Central Eastern Anatolia
TR 10 Eastern Black Sea
TR 11 Western Marmara
TR 12 North Eastern Anatolia
Personal Factors
1.00000
.00000
-1.00000
-2.00000
-3.00000
-4.00000
-2.00000
-1.50000
-1.00000
-.50000
.00000
.50000
Poilitical Factors